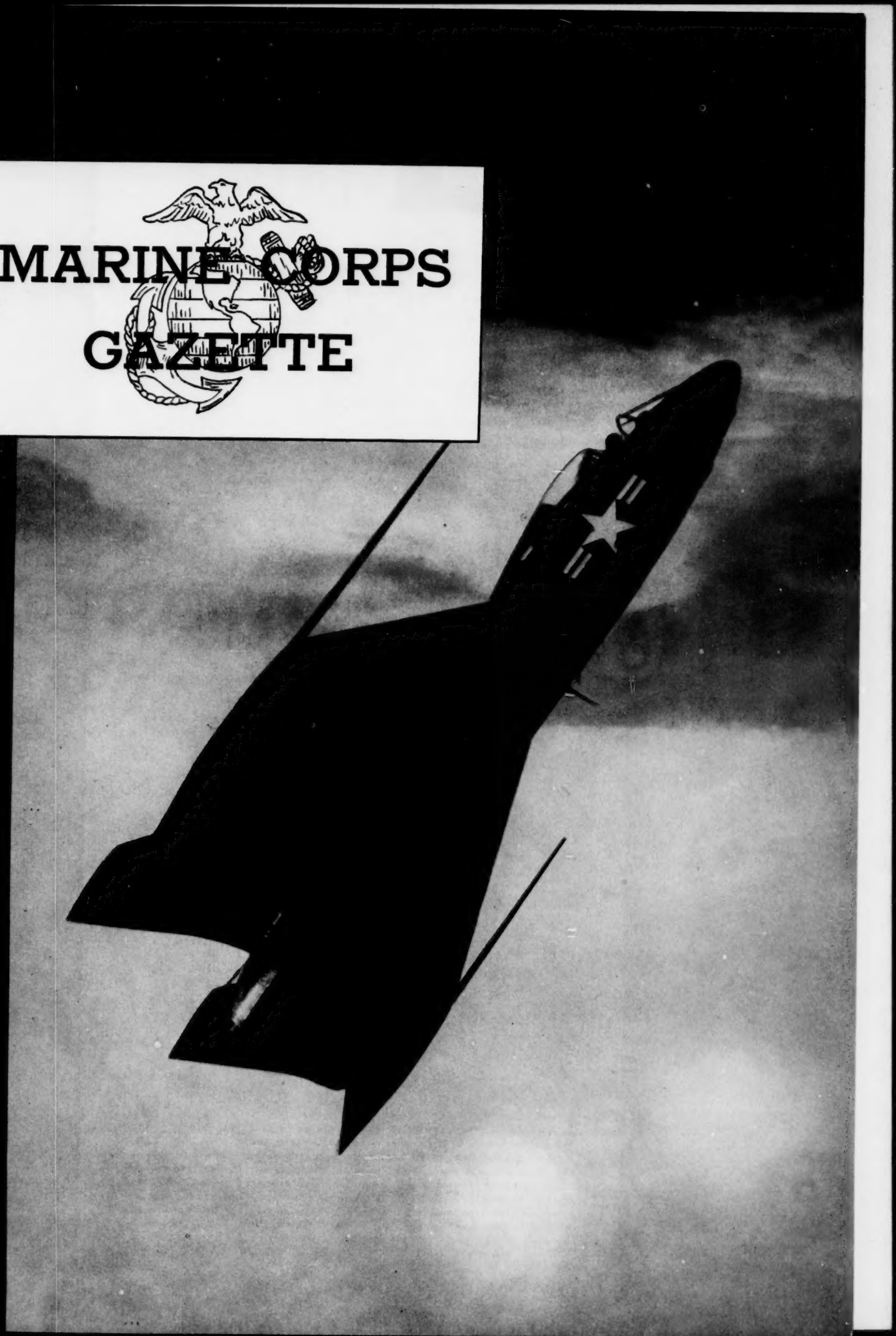
MARINE CORPS GAZETTE



This Month's Cover

THERE HAVE BEEN some great planes in Marine Corps aviation history, notably the DH-4s of troubled tropics fame and the sturdy F4Fs of early World War II. But no single type piled up quite as impressive a record as the bent-wing F4U. It is still with us and is probably the best reciprocal engined shipboard fighter-bomber extant today. But advances in power plant engineering have challenged the Corsair's supremacy and it soon may be passing from the scene. One of the most promising of the new jet carrier fighters is the XF7U-1 shown on the cover. The story of its development is told in *How to Build an Airplane* beginning on page 8.

THE MARINE CORPS GAZETTE

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TO THE EDITOR

Message Center

Contact with Adjacent Units . . .

DEAR SIR:

Maj Peatross' article *Advance by Fire and Maneuver* (November GAZETTE) certainly hits the nail on the head. As he correctly points out: "... units as small as squads stopped the advance of battalions because there was no physical contact between them and the adjacent unit." I believe a related reason (in addition to those Maj Peatross has given) is the misunderstanding or misuse of the phrases "contact from left to right" or "contact from right to left" which so often appear in paragraph 3x of our operation orders. Most units consider this phrase an instruction to cling to another unit's flank come hell or high water. This obviously is a *misunderstanding* of the term — such "shoulder to shoulder" contact is unnecessary or even undesirable in most situations. Now as to the *misuse* of the phrase: too often orders specify the direction of contact when it is unnecessary. If suitable objectives can be described for units, why burden them with a contact responsibility? It tends to place emphasis on the contact rather than on the seizure of terrain. Anyway, who can say that merely because another unit has been charged with responsibility for maintaining contact that you may forget about your flank? The contact phrase belongs in our military vocabulary, but when used, should serve a specific purpose and not be used only because previous orders have done so. Nine times out of ten the phrase "reestablish contact after seizure of objectives" would serve a more useful purpose — and even that should be SOP. These thoughts, then, are proposed as Addendum 1 to Maj Peatross' excellent article.

CARL W. HOFFMAN
Major, USMC

Each month the GAZETTE pays five dollars for each letter printed. These pages are intended for comments and corrections on past articles and as a discussion center for pet theories, battle lessons, training expedients, and what have you. Correspondents are asked to keep their communications limited to 200 words or less. Signatures will be withheld if requested; however, the GAZETTE requires that the name and address of the sender accompany the letter as an evidence of good faith.

Pistol or Radio . . .

DEAR SIR:

In the September "Message Center" 2dLt J. E. Dolan recommends that a platoon leader be equipped with a pistol instead of a carbine because the platoon leader is burdened with an SCR 536 better known as the "Handy Talkie."

I believe that the lieutenant knows that the Radio SCR 536 total weight is only five and a half pounds including batteries and only slightly larger than a carton of cigarettes. Where is the burden?

As for operating the SCR 536 efficiently and carrying on an intelligent radio conversation it would be just as tough for a platoon leader to fire a pistol as it would be firing a carbine if confronted by an enemy.

When the "Dick Tracy" wrist watch radio becomes a T/E item platoon leaders will have no worries with what T/E weapon a platoon leader will be armed.

STANLEY A. NOWAK
Warrant Officer, USMC

ED.: The GAZETTE plans an article in the near future on the technical progress being made toward smaller, more satisfactory two-way radios.

Popularity Contest?

DEAR SIR:

Bertram Vogel in his *Fitness Reports from Down Under* (October, 1948) proposes that junior officers report on the fitness of their seniors.

Before all the opposing experts register their protests, I'd like to relate that in at least one instance the basic idea of juniors reporting on seniors has been tried in the Marine Corps with considerable success. I used the system aboard ship to select candidates for promotion to private first class, corporal, sergeant, and platoon sergeant and to help me decide whether to recommend the promotion of individuals in the first two pay grades. This was at a time when regular fitness reports were not required on noncommissioned officers; so the results didn't get to Washington and, of course, the test does not quite prove Mr Vogel's point because he deals with officers' fitness reports. However, my system selected candidates to take an examination for promotion and that, in effect, is what fitness reports on officers will be doing now that officers are

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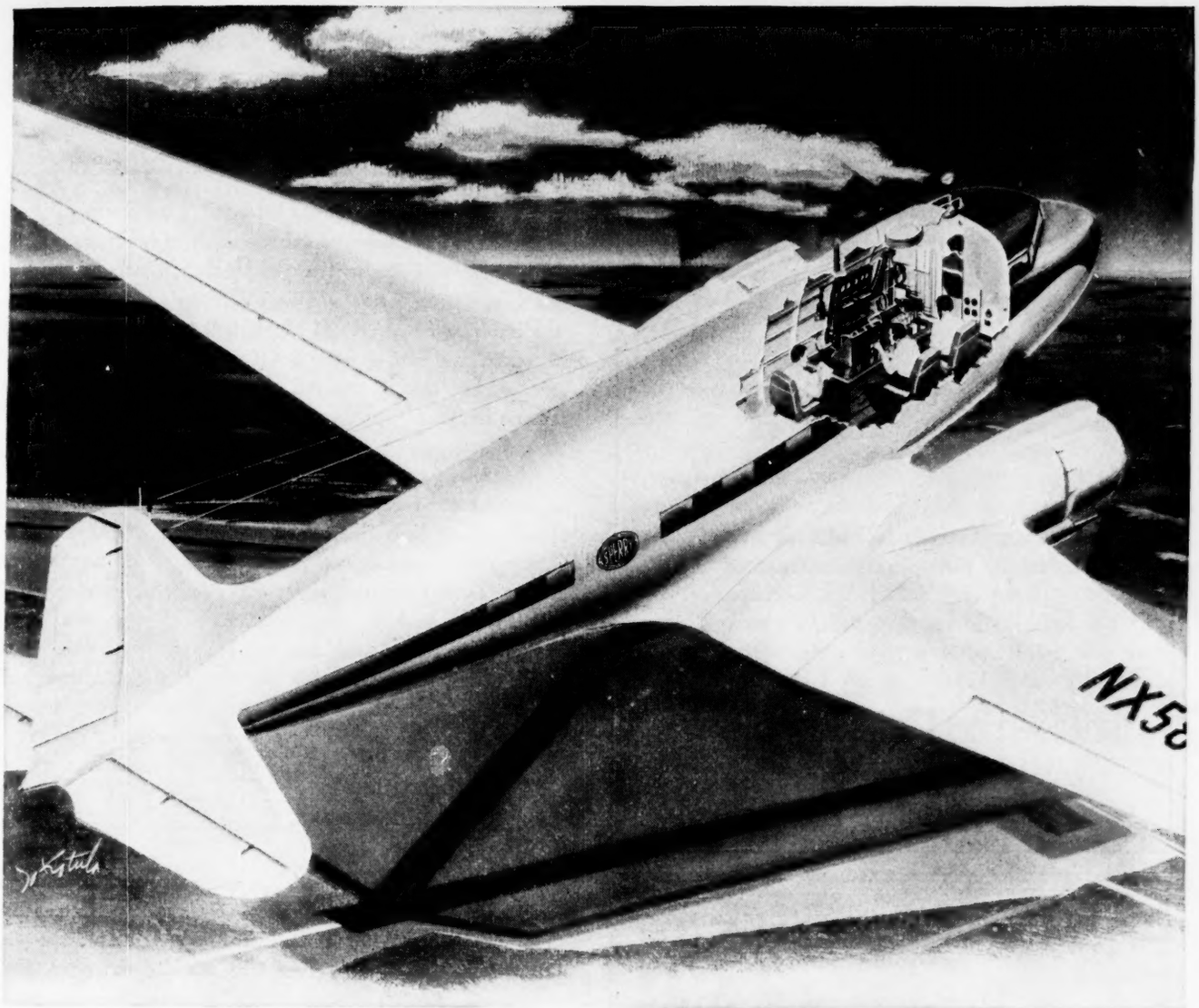

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Message Center

continued from page 2

again required to be examined before they are promoted.

Although I had never seriously considered it for officers, the idea of seniors being reported on by their juniors occurred to me several years before Mr Vogel's young gunnery officer got the inspiration in 1944. It all started during my first criuse as an enlisted man — when I know I wasn't supposed to get excited, but did. I observed that the most persistent gripe among the peons was that the "Old Man" had promoted the wrong man.

It used to be the practice of Headquarters Marine Corps to issue promotion authorizations for morale purposes when a post went too long without anyone adding a stripe. That was sound policy because promotions, when awarded to men who deserve them, rank right along with good chow as a necessary element for building and maintaining good morale. Conversely, when the wrong man gets a promotion morale drops. This is the case because (1) the man who should have been promoted feels that his efforts were wasted, (2) other men are made to feel that getting promoted is a matter of chance; so they quit working, (3) the newly promoted man has trouble getting cooperation, and (4) even though the officer making the promotion did it conscientiously, respect for him declines sharply.

As a private, private first class, and corporal I learned that the majority view of the juniors gave a near-perfect evaluation of the seniors. NCOs with whom the privates had trouble were usually the ones who troubled the officers and when the privates predicted that a newly-promoted NCO wouldn't make out, he didn't. From a low-man-on-the-totem-pole vantage point, I watched these predictions in small units for four years and finally became convinced that the surest way a commanding officer could pick the right man for promotion was to turn to the juniors and equals for their opinions.

When I became commanding officer of a 41-man ship's detachment I put my idea into practice. With the help of my detachment second lieutenant, who shared some of my enthusiasm for the plan, I designed a report form that permitted every man in the detachment to report on every other man. The form was patterned after the standard NCO fitness report form (NAVMC 655-PD) but it required a numerical score based on 5.0 to be awarded each individual for each item listed on the report. These forms were accomplished every time it was desired to establish a list of persons eligible for promotion examinations.

An extensive promotion examination was used which made it impractical, for example, to examine all the privates first class when one of them was to be promoted. So, after the lieutenant and I decided how many men could be examined, the special fitness report form was used to select those eligible to

take the examination. If five men were to be examined, the five privates first class rated at the top of the group by their juniors, equals, and seniors would be put through the promotion mill.

In the case of corporals and sergeants going up for promotion it was often possible to examine all of them. In these instances the rating of candidates for promotion as determined from the report form was given a certain weight (15 per cent) in the final examination score as was length of service, length of time in grade, marksmanship, etc.

The system described above was used for more than a year to effect 17 promotions to corporal, sergeant, and platoon sergeant. Its worth was proved by the fact that my lieutenant and I were unable to find a single man who thought the wrong man had been promoted in any of the 17 cases. In the face of the fact that enlisted men are generally extremely critical of promotion selections, the lack of gripes indicated that the system was a good one and this offers some support for the principle of juniors reporting on seniors. I might add that in the same outfit we had numerous complaints about promotions that were effected prior to institution of the system being discussed.

There are several reasons why the men were satisfied with promotions made under a system where their opinions came into play. For one thing, the system undoubtedly selected the best men for promotion eligibility because a senior's failings and abilities can be more easily detected by his juniors than by his seniors. It is often possible to fool seniors but I have yet to see an officer or enlisted man who could pull the wool over the eyes of his juniors.

Even if a bad choice were made under this system of selection by juniors, it is unlikely that the effect would be as detrimental as a similar mistake made by seniors. Every individual in the command would feel some responsibility for the error in such cases and therefore it appears doubtful that they'd advertise their mistake to the extent necessary to damage morale.

As I have already indicated, these "all hands" reports had some bearing on whether I recommended my first two pay graders for promotion (I had no authority to promote above the third pay grade). One of my first sergeants registered a strong objection to this element of the system. He couldn't stomach the idea of a recruit private's opinion having anything to do with whether or not he was recommended for sergeant major. I was never able to convince this sergeant that my system was sound. I did get him to admit, however, that he thought he was in a better position to know whether I was a competent officer than was the captain of the ship and he went so far as to state that by virtue of having served under the detachment lieutenant, he was more qualified to judge his soldierly abilities than was I. I rest my case on the sergeant's admissions.

D. D. Nicholson, Jr.
Captain, USMC

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Message Center

continued from page 5

Our Error . . .

DEAR SIR:

Isn't the artillery piece depicted on page 38 of the December issue of the "Gazette" a 155mm howitzer instead of a 105mm? That has a box type trail, something the 105mm doesn't have and also the flange at the muzzle of the piece.

JAMES F. MCINTOSH
Sergeant, USMC.

ED.: To Sgt McIntosh and numerous other correspondents who have called our attention to our errors on pages 35 and 38 of last month's GAZETTE, our apologies. The self-propelled artillery piece on the bottom of page 35 was *not*, of course, a 240mm howitzer, but a 155mm gun. The antique piece on page 38 was not a 105mm howitzer but a Schneider pattern, World War I vintage, 155.

Battle Jackets Again . . .

DEAR SIR:

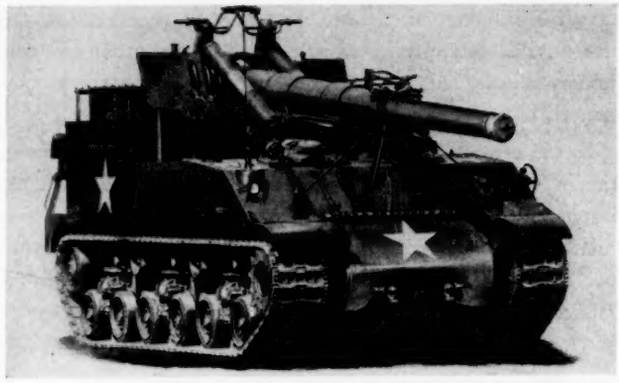
One has to admire the valiant, though losing, battle our Quartermasters have put up in relation to the battle jacket. When the drape shape first made its appearance, it appeared hardly likely that the undaunted troops who had cut down shirts and undgarees as ruthlessly as an enemy patrol crossing a skyline would hold still for loose cloth. But by education, admonition, and some careful fitting, the Supply boys proved they had a practical uniform item which would still look well when worn properly.

Having put up such a good fight against such odds, the Quartermasters will not, I am confident, give up in the face of the present crisis—namely, how can the uniform look well when the troops seem determined to wear it with the buttons unfastened?

Maybe one of these alternatives will prove to be the "school solution":

1) Remove ALL buttons, and re-designate the item as the "Jacket, beer and lounging, M-1."
2) Attach a piece of pink lace inside the front of the jacket so that it will show when unbuttoned.
3) As a last resort, indoctrinate a few of the troops with the idea that since they can wear civilian beer jackets on liberty, it might be better not to wear the uniform unless they are prepared to wear it like Marines.

T. N. GREENE
Captain, USMC.



No 240mm howitzer this . . .

Schneider, vintage WW I . . .

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The Marine Corps Gazette

PROFESSIONAL MAGAZINE FOR THE UNITED STATES MARINES

JANUARY 1949

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This Month and Next

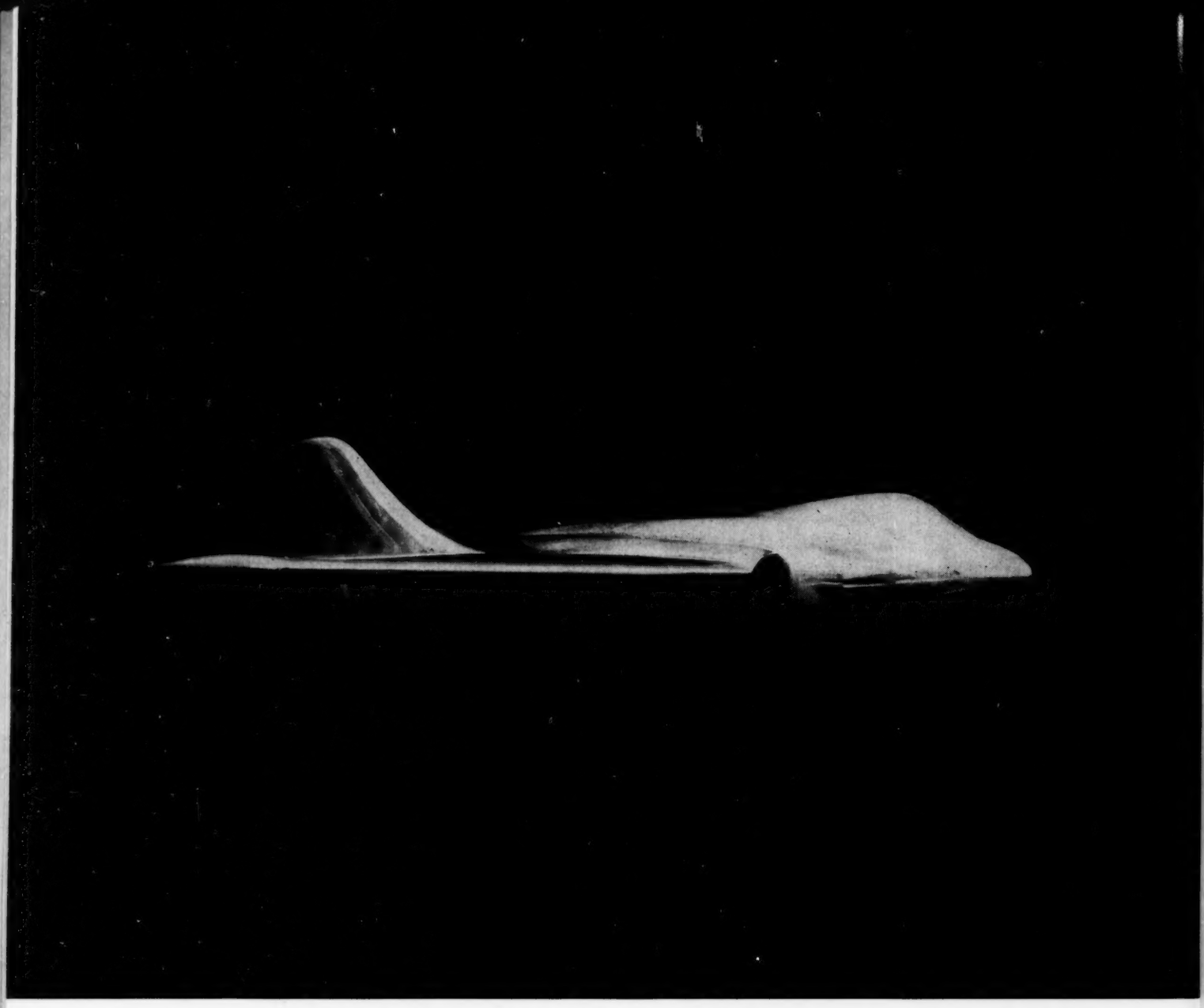
SOMETIMES THE STORY BEHIND A STORY is more interesting than the story that is eventually published. We sort of feel that way about ***How to Build an Airplane.*** The thing got its beginning during the Reserve maneuvers at Cherry Point last July. The Reserve pilots pinned Chance Vought representative Keith Baker against the wall, told him that the Corsair was a grand plane but was growing somewhat ancient. They wanted to know when they were going to get something newer, to be specific: something with jets. The obsolescence of the F4U was emphasized by a beautiful demonstration by LtCol Marion Carl's squadron of jet-powered McDonnell FH-1s.

Baker, who served as an exec aboard an LCI during the war, got Capt Edwin Simmons, the GAZETTE's managing editor, aside and told him that Chance Vought had a very hush-hush jet-powered job almost ready to fly which would put everything in the way of current shipboard fighters in the shade. (There was *no* shade at Cherry Point; it was possibly the hottest week of the year.) He invited Simmons up to Stratford to take a look and also to write an article on why it takes so long to develop a radically different aircraft type.

Simmons went up to Stratford toward the end of September, was treated royally, and came back with a stack of photographs and a bundle of notes about *this* high. The airplane was still highly classified and Simmons felt like spy-bait carrying all that stuff around. But he worked it into an article and then began the struggle for security clearance. One copy went to Chance Vought for an accuracy check. This began a long interchange of telegrams and registered packages between the GAZETTE and Winthrop Brubaker, Baker's assistant.

A couple of trips were made to the Navy Department to learn just how much could be said when the existence of the plane was made publicly known. Eventually the article disappeared into BuAer.

Shortly before Thanksgiving a press conference was held at Patuxent and the first general release of information on the XF7U-1 was made. The GAZETTE began ringing phones trying to shake loose its own XF7U-1 story in time to make the January issue. Clearance (subject to certain deletions and modifications) finally came through—one of those just-before-deadline clearances—and the GAZETTE is therefore able to tell those impatient Corsair jockeys why it takes so long to develop a new jet fighter.



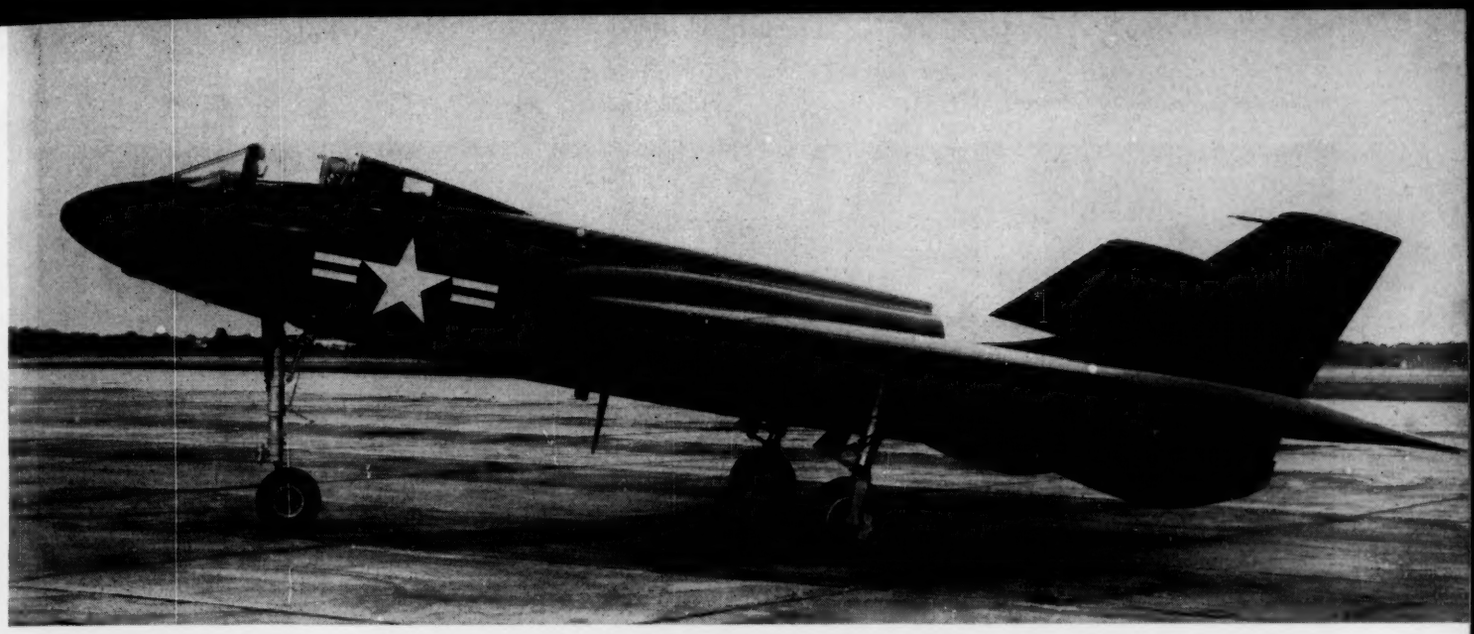
Something like a futuristic designer's dream is this stainless steel precision model of the Chance Vought XF7U-1.

How to Build an Airplane

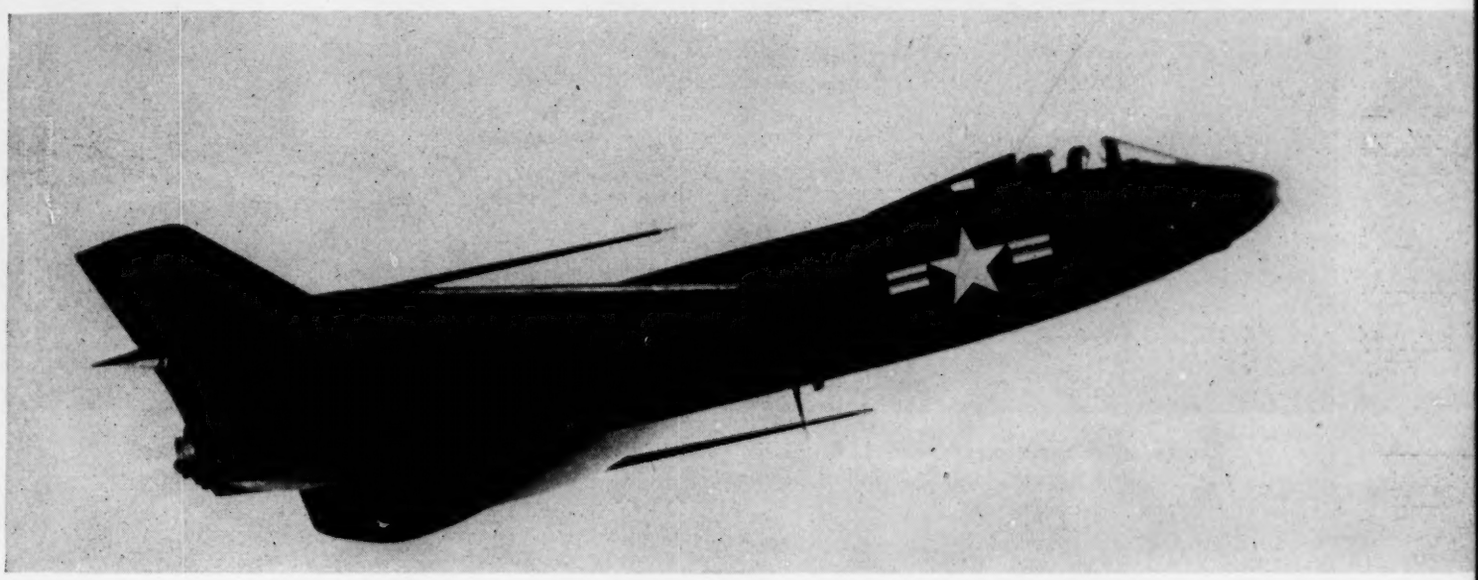
SOMETIME IN THE EARLY 1950s A SQUADRON OF Marine pilots may walk out to the line and find a string of slick new aircraft waiting for them. If things proceed as they might, the new planes may very well be Chance Vought F7Us, twin-jet jobs noticeable for long-nosed slender fuselages, radically sweptback wings, no horizontal tail surfaces, and two vertical fins and rudders. If the marines react characteristically they will mutter "It's about time," and waste no backward glance on the F4Us which have been hauling them around so faithfully for the past eight years.

Now if that date, the 1950s, stopped you cold, let it be said that it takes time today—*an increasing amount of time over yesterday*—to *design* and *develop* and *produce* a new aircraft. The Marine Corps has jets and will have more before the F7U joins the Fleet, but let us presume for sentiment's sake that the as-yet-unnamed F7U will be the next standard fighter for Marine aviation. Why did it take so long to get it into production? Well, for the impatient, here are some of the answers:

The Corsairs were still scrapping over Okinawa when BuAer and Vought designers first started thinking about



On the ground the XF7U-1 is as ugly as a pterodactyl; in the air it becomes a slim-nosed, death-laden dart.



By Capt Edwin Simmons

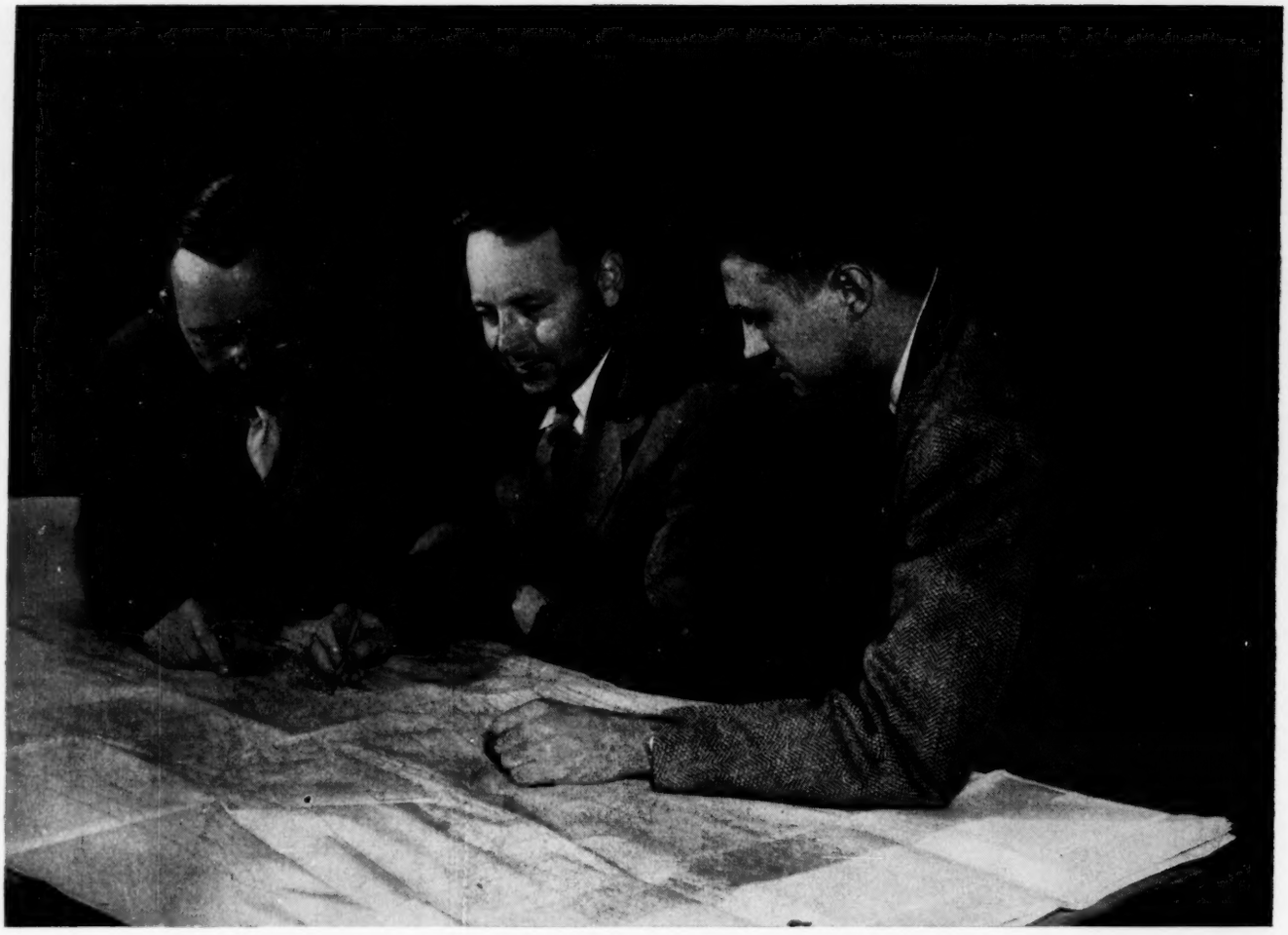
Photos by Chance Vought and Navy

the F7U.* It began that long ago. By the fall of 1945, the Preliminary Design Group of the Bureau of Aeronautics was putting together, hypothetically, a new type of fighter plane. From operational experience they knew what was wanted by the Fleet and Marine aviation. They tested these "requirements" against what they thought the aircraft industry was capable of producing. When they had decided roughly what kind of an airplane *could* be put together they consolidated their thinking in the form of an *outline specification*. This went out to interested manufacturers in February, 1946, inviting competitive designs.

In general these BuAer specifications set forth the expected performance of the aircraft to be designed. Designers were expected to adhere closely to requirements for maximum speed, radius of action, stalling and landing speeds, rate of climb with military load, armament and fire control, choice of power plants, catapult and carrier characteristics, acceleration limits, and so on.

As high as these expected performance standards were, they came as no surprise to Chance Vought Aircraft which, like all comparable airplane manufacturers, had

*The intervening models, the XF5U-1 and XF6U-1, deserve a word of explanation. The XF5U-1 was the much-publicized "Flying Pancake," a circular flying wing type with two conventional engines and super-size four bladed props which gave it many of the characteristics of a helicopter. It never went into production because of the tremendous strides in jet propulsion. The XF6U-1 is the "Pirate," Chance Vought's first jet design. It has been ordered in limited numbers for operation with the Fleet.



Experimental department head J. R. Clark, center, discusses plans with project engineers Russ Carlson and Lyman Josephs. Initial concept of XF7U-1 was work of dozen or so top engineers.

its own Development Group busy keeping abreast of trends in fighter aviation.

A small staff of engineers roughed out preliminary designs, and, in time to meet BuAer's deadline of 15 April 1946, the prospective F7U went to Washington in the form of structural drawings, performance studies, and models. These initial designs or *engineering proposals* were submitted in four different versions.

Chance Vought designers were pinning most of their hopes on the version selected by the Navy and this is the design which eventually emerged as the XF7U-1. The engineering proposal was followed on May 1 by the *cost proposal.*

BuAer now considered the various manufacturers' proposals competitively, weighing such factors as adherence to original specifications, design, cost, expected time of delivery, and the manufacturer's engineering capacity and record of past performance. Upon the recommendations of the various branches concerned, the Chief, BuAer, approved the F7U proposal and issued a procurement directive which materialized as a *letter of intent* dated 25 June 1946. This, in substance, was a contract for three experimental aircraft. Chance Vought Aircraft has not revealed the exact amount of money involved but 10 million dollars is not considered excessive in developing a radically different, perhaps revolutionary, airplane.

The designing of the F7U proceeded. Originally the concept of about 12 men, the year-long project eventually required the efforts of 180 draftsmen and engineers to translate the original designs into working drawings. If this sounds slow let it be interjected here that its predecessors the F4U-1 and F6U required 12,000 and 9,000 drawings respectively. Despite its increased complexity the F7U will only need 2,500 separate drawings before it is ready for production. Approximately 35 prints are required of each drawing; to make these Chance Vought uses 50,000 square feet of blueprint, van dyke, and ozalid paper per month. During the war peak the monthly expenditure of paper was over one million square feet.

However, the fabrication of the first F7U did not wait for the completion of this literal mountain of paper. As fast as an element of the design was completed it was

Marines, fliers and otherwise, may be wondering why the Corps does not have jet fighters in operational numbers. The answer is that it takes an increasing amount of time to develop a shipboard fighter-bomber. The new XF7U-1 shows promise

tested, checked, and corrected, if necessary. The power plant, air frame, hydraulic system, cockpit, landing gear, etc., were all being developed concurrently.

Although the airplane is largely a scientifically precise creation, the smoothness of its exterior contour is to some extent, interestingly enough, the result of the artistry of a Swiss-born sculptor. Engineers have found that an artistic shape is usually an efficient shape.

The aerodynamic soundness of the projected design was tested with a variety of models. The number of man-hours involved in model making alone varies from 80 hours for a simple display type to nearly 4,000 hours for an exact one-third scale wind tunnel model. Now that they were dealing with flight at high Mach numbers, the designers learned that traditional mahogany wind tunnel models couldn't always stand the gaff, particularly where high temperatures were involved, so that for some tests steel models had to be used.

One of the earliest results of this effort was the *mockup*. This was an exact-size copy in wood of the projected F7U. Completed it looked real enough to fly away. Because of the special attention given to cockpit details an extra mockup of just the cockpit installation was made.

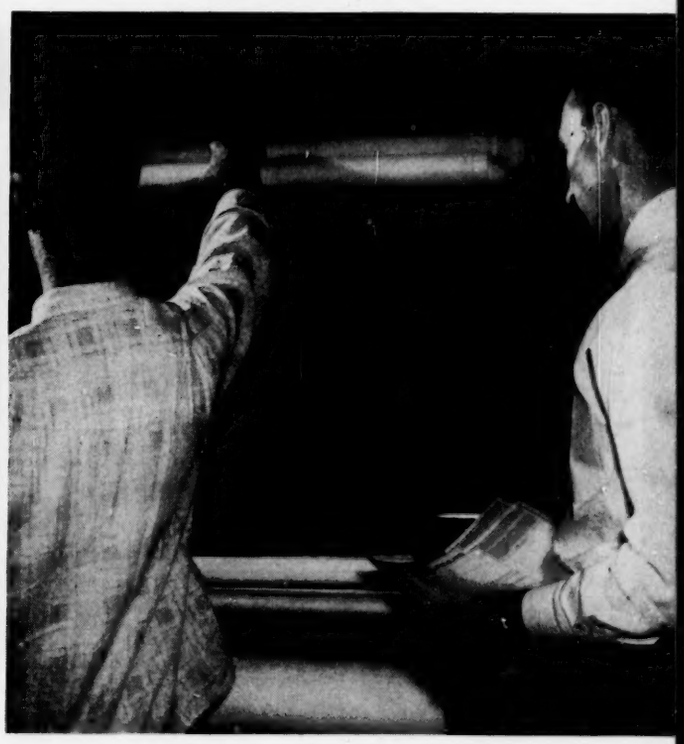
For three days—October 15th to 18th, 1946—a visiting board from BuAer examined the mockup. In addition to the 18 or 20 regular members there were observers from Patuxent and other naval air activities, two British flyers, and Air Force representatives. Being for the most part flyers themselves, and feeling that a plane is no better than the ease with which it can be flown, the mockup board's attention centered on the cockpit. (The Navy, in fact, is making a definite effort to standardize cockpit arrangements logically.) Various changes were suggested by the board and incorporated by Chance Vought technicians at night between conference sessions.

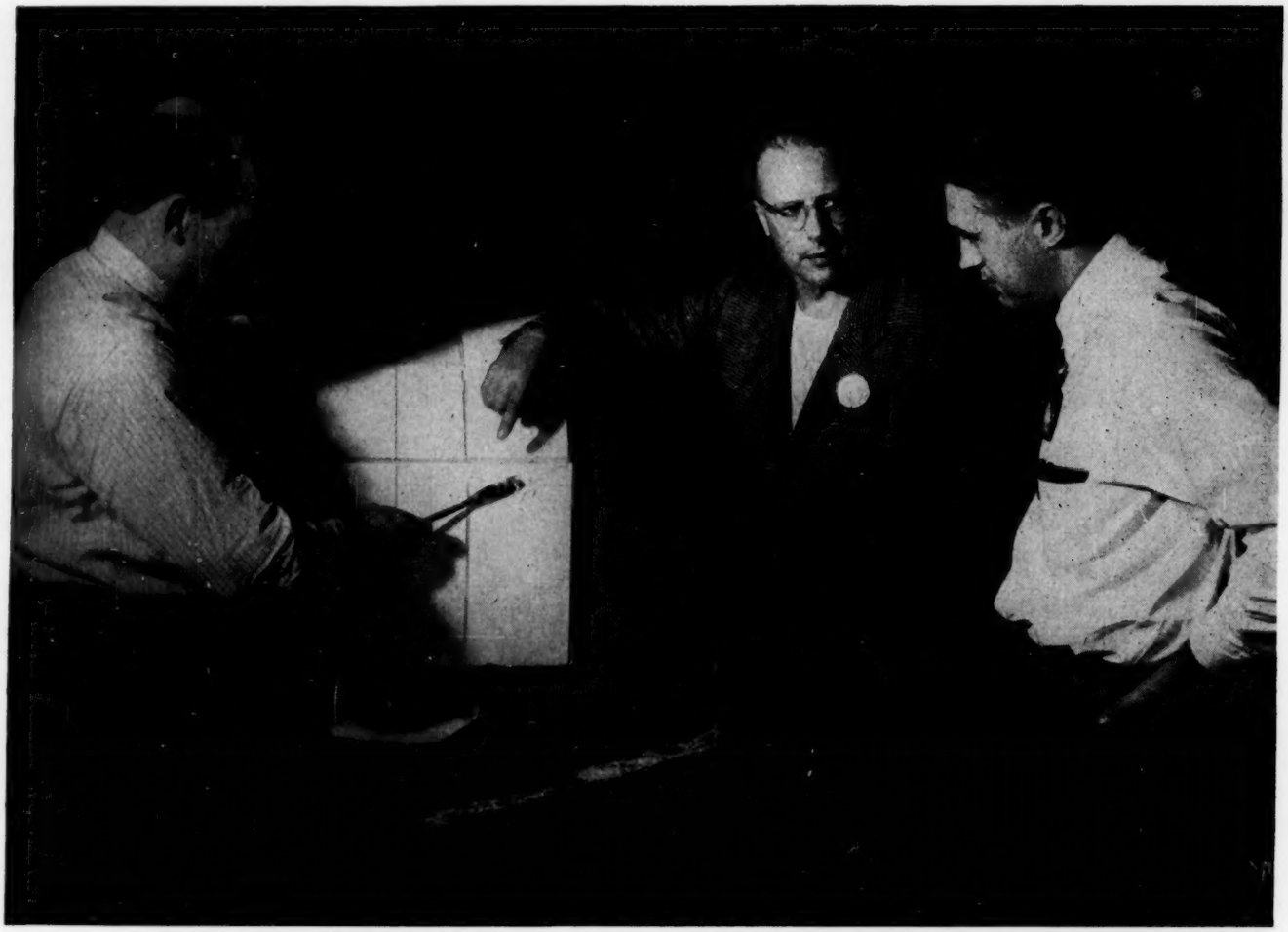
With all hands finally satisfied that the design represented by the mockup was a sound one, actual fabrication of the first three XF7U-1s was begun. To a large extent these were hand-made articles. With changes they would be the prototypes of the F7Us to be produced in the foreseeable (if not immediate) future.

Once upon a time only one experimental airplane was

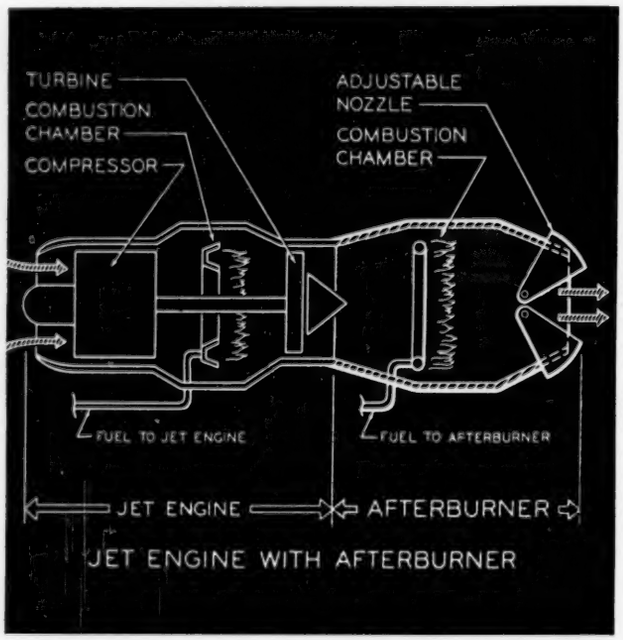
About 180 engineers and draftsmen needed a year to translate design of XF7U-1 into working drawings.

35 prints of every drawing are required. Blueprint supervisor William H. Meier, right, is 25 year man.





Swiss-born sculptor Paul Rudin, left, has an unusual role in the designing of experimental aircraft. Conferring with him is Norman Diges, Mold Loft supervisor, and Lyman Josephs.

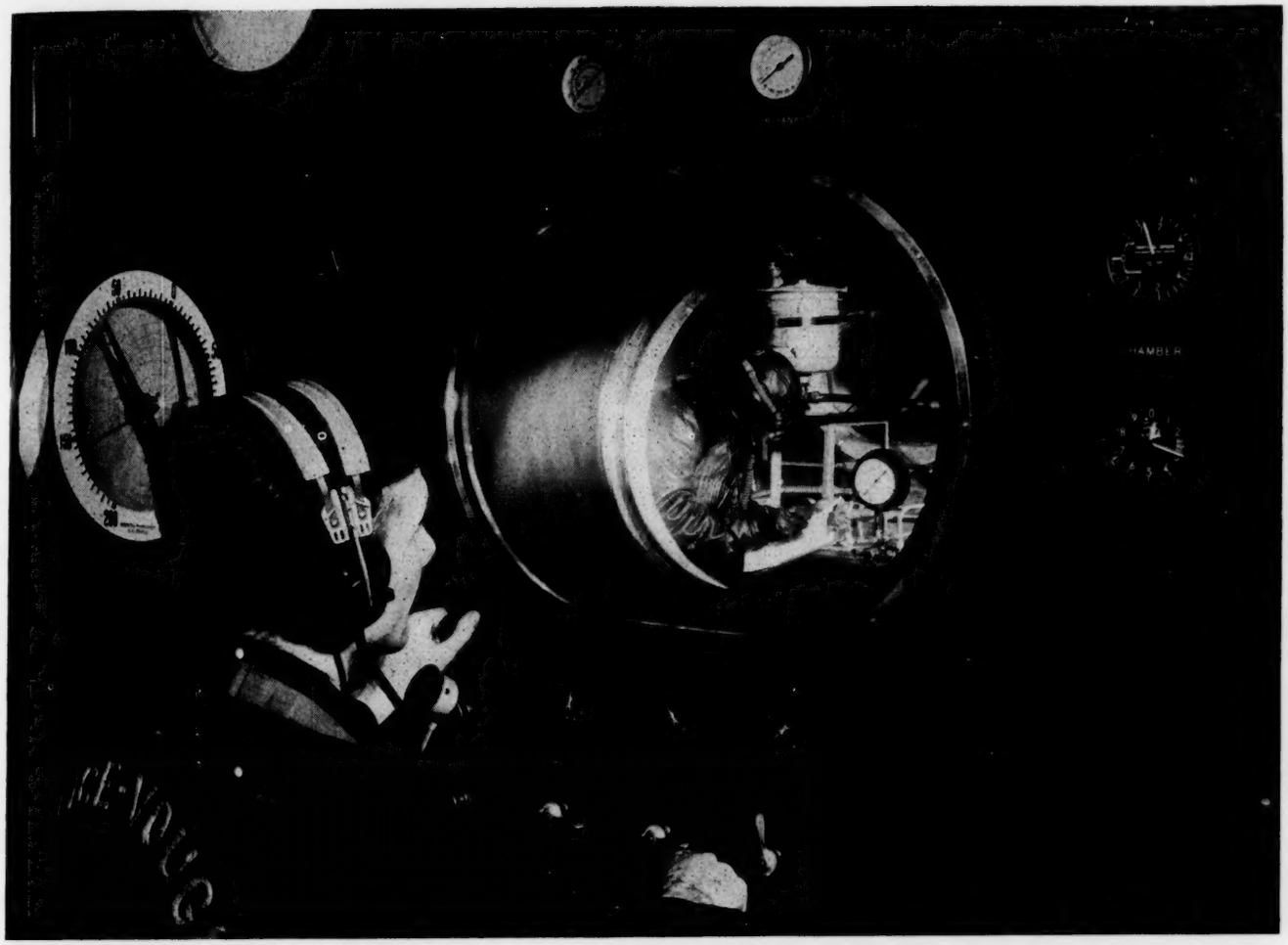


Twin turbojets power the XF7U-1. Afterburners work on ramjet principle, give extra power for emergencies.

built, flown, and tested. Aircraft manufacturers and the Navy have learned that this is false economy for if the pilot model crashes during a test, progress on the design is delayed until it can be rebuilt. Now general practice is to build three so that armament, power plant, and general flight tests can be conducted concurrently. Also the manufacture of three airplanes justifies the making and use of metal templates and these, while they take time to fabricate, can be put to good use when the plane reaches the production stage.

By July 1948, the first of the three F7Us came out of the shop, ready for the necessary preliminary tests, prior to flight testing. There it was, sleek and smooth, and showing deceptively little outward evidence of the tremendous amount of planning and work that went into its building. The airplane was spotlessly clean, because, in handling jet jobs, test pilots have learned that even a coating of dust on the wing surfaces may cut the top speed 30 mph.

Its sweptback wings were a compromise; raking them back delayed the effects of compressibility but increased landing problems. If one plane surface slants back, so

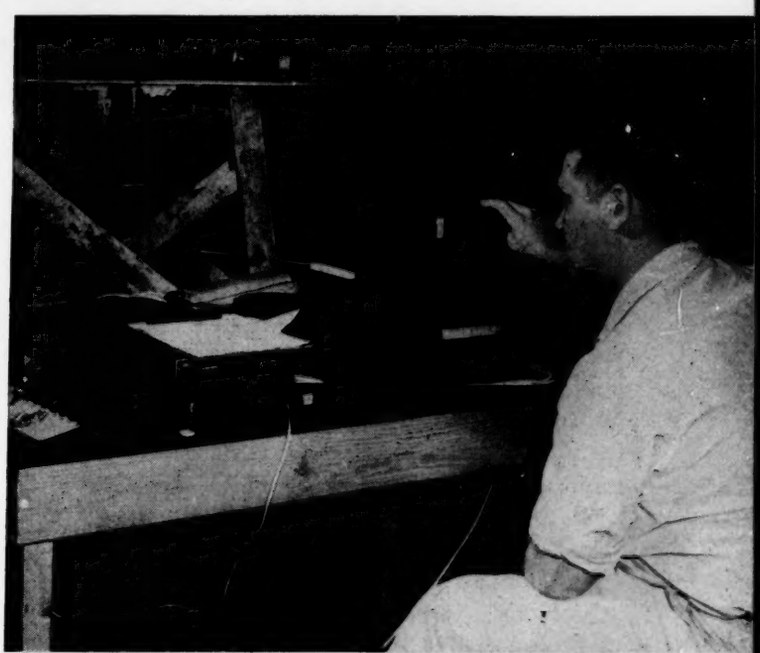


A hydraulic system is tested in a pressure chamber simulating 30,000 feet altitude. Testing and experimenting with sub-assemblies proceeded while air frame was being designed and fabricated.

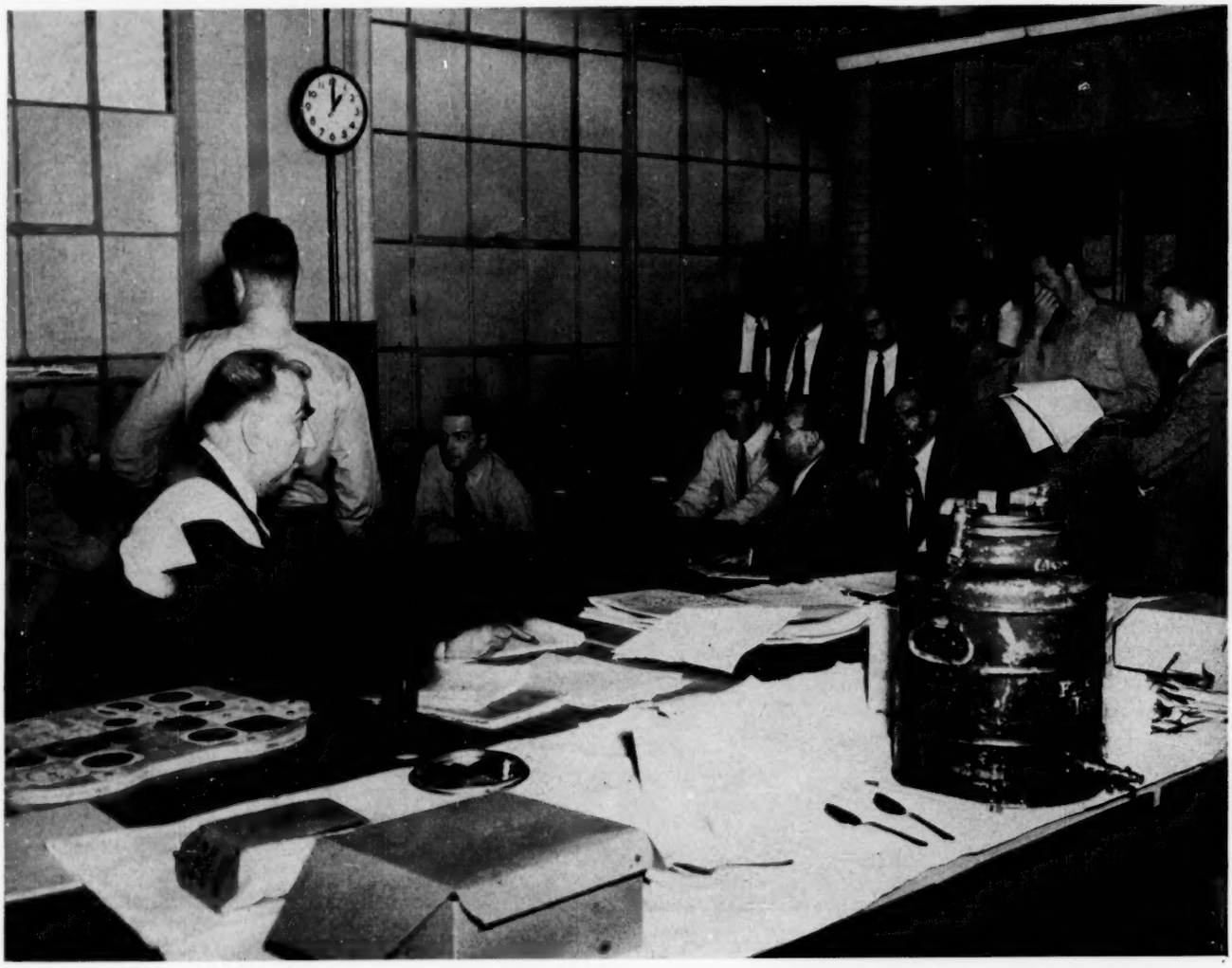
must the rest; therefore, the twin vertical fins and the rudders are also sharply swept back. Two wheels of the tricycle landing gear fair off into the bottom of the fins. Air ducts at the wing roots suck in the air needed by the Westinghouse turbojets which, like fat cigars, extend two-thirds the length of the fuselage. The engines, which can be changed in a very short time, have Solar afterburners, which for combat performance give high bursts of power for short periods.

Unlike its gull-winged forbear, the F7U's wing angle is flat, no dihedral whatsoever. The flippers on the trailing edge of the wing act as both elevators and ailerons, and are called ailevators. Because of the terrific speeds for which the plane is designed, conventional balanced controls wouldn't work. The F7U's controlling surfaces are completely actuated by hydraulic servomechanisms. That's a jaw-breaking mouthful, but what it means is that the days of pulleys and cables and manually operated controls are past. And to top this, the F7U's controls have a carefully simulated "feel," because pilots, being human, need a tangible reaction.

The pressurized cockpit is placed well up in the nose to



Technician John Park tests electrodynamically the efficiency of hydraulic servomechanisms used on XF7U-1.



The cockpit board met twice, once in October 1946 and again in October 1948. Navy is making a definite effort to standardize cockpit arrangements. Mockups are exact-size wooden replicas.

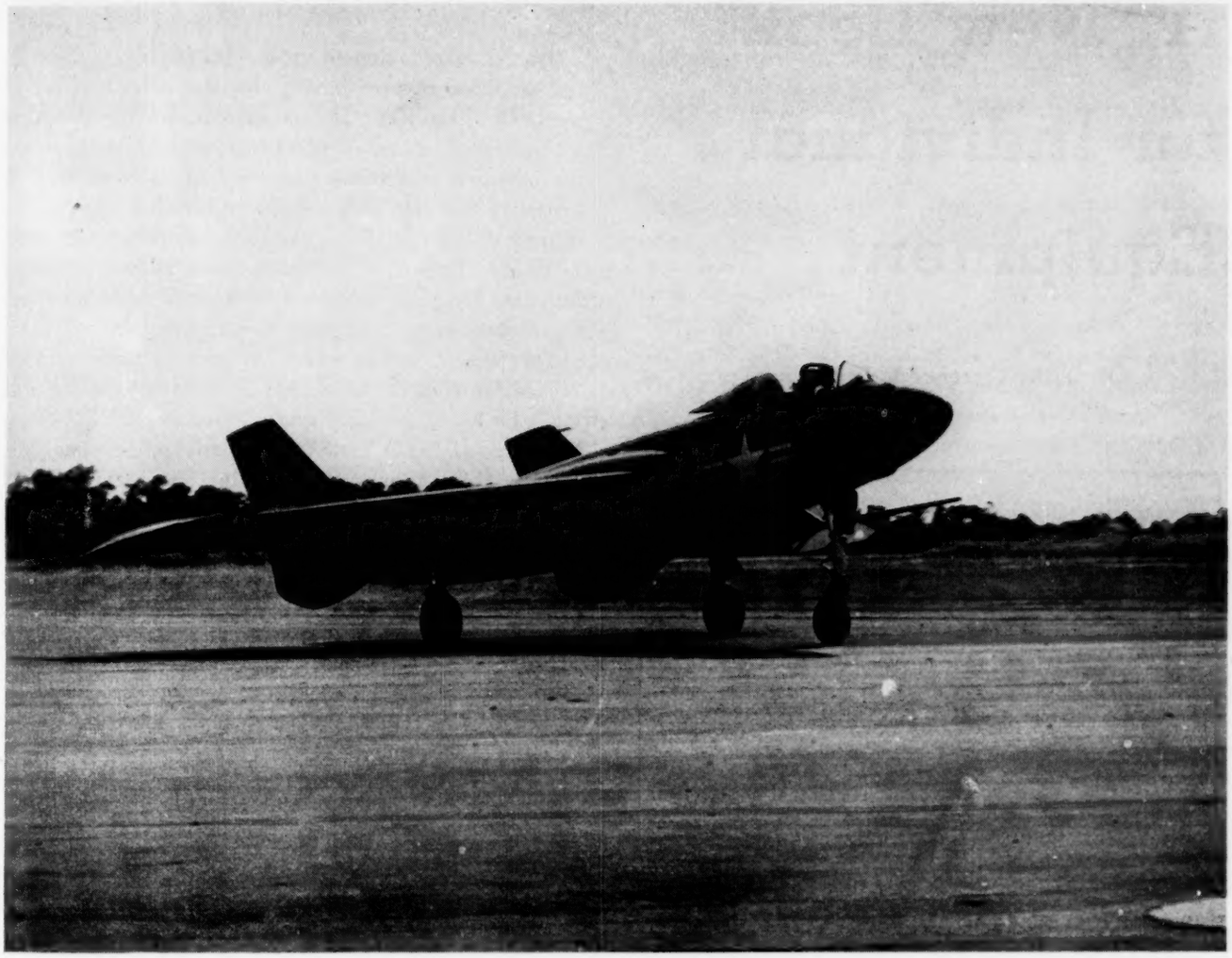
insure good visibility. The pilot's seat is ejectable for bailing out at high speeds. Both the pilot and the seat can be ejected at a velocity calculated to clear the aircraft. Once clear, the seat is jettisoned and a normal parachute descent made.

Designed for carrier use, the XF7U-1 has a tail hook for arrested landing and is equipped for catapult launching. The landing gear is of the tricycle type. Uniquely, the plane has no landing flaps. Instead it has a system of leading edge slats. The extension of these during a landing approach increases the wing lift and delays the stalling point. Speed brakes for reducing speed sharply in aerial maneuvers as well as in landing are located in the trailing edge of the wings. Armament is normal for a fighter of this type.

That first F7U was handled like the very expensive baby it was. The first taxiing tests were conducted on 15 September 1948. A week later it was delivered by barge to Patuxent for flight testing.

Although held at a naval air station, these tests were made by Chance Vought personnel. The days when a test pilot stepped into a plane and hoped are pretty well past. Today's testing is done by men who are aeronautical engineers first, daredevil pilots second. The initial flights indicated calculated performance figures would be met. This was no surprise. Hadn't the same designers predicted the top speed of the F4U-1 within two miles per hour? But there were minor "crabs" to be eliminated. Most of these could be corrected right on the spot with the changes sent to the Stratford plant in the form of "engineering orders" to be entered on the original drawings.

The Navy announced the successful completion of these initial flight tests in November. A press conference was held at Patuxent and the existence of the plane was made known along with limited performance data. Rated in the "over 600 mph class," the XF7U-1 demonstrated a high rate of climb, due primarily to its favorable thrust-weight ratio and its tailless design which minimizes drag. A considerable weight saving was made by using larger



The XF7U-1 was first taxied on 15 September 1948. There was the inevitable tension that is always present when an experimental airplane is rolled out of its hangar for the first time.

than normal amounts of magnesium instead of conventional aluminum alloys in certain areas.

The Navy will shortly take over the XF7U-1 for its own tests which may require an additional six months. If the Navy follows its customary procedure, one plane will be used for power tests, the second for dive and stability testing, and the third will be worked over for suitable military characteristics.

Meanwhile the new Chance Vought plant in Dallas will be at work on their initial production contract—perhaps building enough planes to equip an experimental squadron.

This changeover from the production of F4U-5s to F7U-1s would in itself be a herculean task. It will be made doubly so by the fact that Chance Vought Aircraft is in the midst of moving from Stratford, Conecticut, to Dallas, Texas. With tooling-up completed and production begun, the first operational F7Us can be expected early in 1950.

Then Chance Vought engineers can cross their fingers and hope they have a plane which can, with modifications, remain a first-line fighter for five or even ten years.

If the F7U does all this is will approximate the record of the phenomenally successful F4U. The preliminary designs for the time-tested Corsair were submitted to the Navy on 8 April 1938, the plane was accepted by the Navy on 3 March 1941, and the first operational F4U-1 delivered on 31 July 1942. Since that time Chance Vought has turned out 7,401 F4U-1s, 4s, and 5s. Associate contractors Brewster and Goodyear have delivered a total of 4,741 Corsairs. The F4Us were first taken into combat by VMF-124 on 13 February 1943. Before the war was ended, they had shot down 2,140 enemy aircraft, against a loss of 189 Corsairs; a ratio of slightly better than 11 to one. The first production F4U-1 required 92,500 man-hours to build; the last F4U-4 on V-J Day took only 3,350 man-hours. That's quite a record for any plane to top, but Chance Vought is putting its money on the F7U. USMC

A "New Look" for Individual Equipment

By 1stLt Clarence E. Schwaneke

Original Drawings by the Author

Last month Lt Schwaneke told how he went on maneuvers at Camp Pendleton, what he found wrong with the foot marine's equipment, and why he decided to do something about it. December's installment dealt primarily with the deficiencies of the Pack, 1941, and how it could be improved. This month he works over the shelter half and bed roll. Next month he outlines how Marine utility clothing could be made to look better and function better.

THE PRESENT BED ROLL WAS FOUND TO BE ALMOST entirely unsatisfactory during the maneuver. The weather on the beachhead was very damp and the temperature approached freezing each night. The three blankets which were folded into a bag, plus all a man's clothing, were not enough to keep him warm and allow him to sleep. Also, any slight turn during the night uncovered the sleeper and required his making the bed anew. Tall men were extremely unlucky in that most blankets are too short to allow enough turn under to make a sleeping bag. These men invariably ended the night with either feet or shoulders exposed to the elements. It was clearly indicated that some type of sleeping bag was needed to solve the problem.

As men were assigned to working parties during the day and were away from the bivouac area, it was necessary for them to construct their shelter halves and beds at dusk or at night. Many gave up the project and slept rolled up on the shelter half and poncho which further added to their discomfort. The present shelter can be set up in the dark with practice, but at best the structure will be makeshift.

It was observed that many of the men spent much time folding and refolding their bedding to approximate a sleeping bag, only to destroy it trying to slither inside it at night. This, again, indicated that a sleeping bag was needed.

Among the troubles encountered in setting up the shelter was the method of joining the two halves together at the peak of the tent. This is accomplished by fastening several metal buttons on one structure to button holes on the other. It was found that the buttons were hard to fasten in the cold and became unfastened upon being slightly disturbed, causing the shelter to collapse in some instances. Moreover, the button holes allowed water to leak into the tent. It should be kept in mind too, that the shelters being used were new and undamaged.

The present shelter makes no provision for a much needed "ground cloth." It has been established by tests made by the U. S. Army that a "ground cloth" is essential in cold, frosty earth, particularly on snow-covered terrain. We used our ponchos for this purpose, and would have been sorely in need of dry rain cover if it had rained the next day. Even so, the poncho had to be placed in the pack, along with dry clothing and mess gear, while still wet.

Condensation from breath inside the shelter dripped onto the bedding at night, making the entire bed wet by morning. The poncho, lapped over the top of the bedding, helped in this respect, but robbed the occupant of the much needed "ground cloth."

As the shelter was wet on both sides after a night's use, the bedding soaked up the moisture, unless time was allowed to dry thoroughly the shelter before making up the bed roll. If time wasn't available to dry the shelter, then bedding was still wet the next night.

Furnished with the shelter half are a few small pieces of manila rope and several short wooden pegs. The ropes were hard to tie, especially when wet, and the use of them in conjunction with the pegs allowed about an inch opening around the ground edge of the shelter. This was remedied somewhat by piling earth around the tent. However, the dirt was rolled up with the bed roll the next morning.

After setting up and striking the shelter once or twice, it was found that a great number of the men had lost a portion of the small parts mentioned before. Then, makeshift items were put into use, and the individual's ability at improvisation determined whether he had shelter or not.

The wood tent pegs mentioned above either split or refused to hold when pounded into the earth or sand. The tent itself, inexpensively constructed as it is, was found to be rickety when extended and bulky when folded.

The structure now in use has no provision incorporated in its design to stow clothing not worn when sleeping. Any clothing removed for sleeping must be kept in bed with the sleeper, adding to his discomfort. If the clothing is left out of the bed, it gets wet and cold for donning the next morning.

The author found that the shelter half was inadequate to protect the user from cold and dampness, was hard to assemble in the dark, and had to be remade each time a turn was made. He suggests a sleeping bag with ground cloth

Last, but not least, the bed roll had to be rolled in the dark. Using all the care possible, the result was not very satisfactory, and as the wet roll was not tight, the straps on the pack were too short to receive it.

Redesigned Sleeping Shelter and Bed

THE PROPOSED SHELTER consists of three major components; (1) The Ground Cloth-Shelter Tent, (2) The Sleeping Bag, and (3) The Bedding Cover. There are several other items that make up the completed structures, such as mooring pins, tent pole, and ferrules; and supplementary items, such as the mosquito net ends. These items will be discussed later as features of the equipment. The suggested ground cloth-shelter is fabricated of a piece of material approximately ten by eight feet, notched, sewn, and embellished, as shown in detail on drawing number 4. The material suggested should be lightweight, waterproof cloth about the weight of airplane fabric, treated with plastic, such as Koroseal, and of the quality of DuPont Zelan, although more water repellent. There certainly have been lighter, better, more water repellent materials developed recently that could replace the heavy canvas of the present shelter. This cloth should be made white on one side and camouflage on the other, as it is designed to be reversible.

The sleeping bag portion of the bedroll presents no new problems. It should be fabricated of the same weight and type materials as used in the regular Navy aviator's sleeping bag, with snaps, etc., added as shown on drawing number 4. The bedding cover, considered by me to be necessary, should be made of the same material as that suggested for the ground cloth-shelter tent. Drawing number 1 shows an end view of the shelter set up for use, with details of pertinent parts. The second drawing is a side elevation and cutaway view of the shelter ready for use. Drawing number 3 indicates the plan view of the shelter and use of the net end, mentioned later. Sheet number 4 shows the required cloth parts to fabricate the shelter and drawings 5 and 6 indicate the steps necessary to roll the shelter for the various pack arrangements. Many of the shelter's advantages are apparent upon examination of the the required cloth parts to fabricate the shelter and drawings 5 and 6 indicate the steps necessary to roll the shelter for the various pack arrangements. Many of the shelter's advantages are apparent upon examination of the drawings and to determine that none of these features are overlooked, the following are enumerated:

(1) It was found that a ground cloth is necessary on wet or frosted ground to insulate the sleeper from the earth. This design has the ground cloth integral with the shelter.

(2) The shape of the ground cloth and the location of the grommets on the ground cloth affords an easy manner in which to "build" the shelter. The ground cloth covers the entire floor surface of the structure and thus leaves no question as to the area the tent will occupy. It further facilitates lining up the camp area, if desired. The grommets mark the exact positions for the pegs and the tent poles. With a small amount of indoctrination, a man could easily and successfully construct his shelter at night in complete darkness.

(3) As the ground cloth-shelter is reversible, the shelter can be easily camouflaged with its surroundings simply by removing the threaded ferrules, reversing the ground cloth-shelter, and replacing the ferrules.

(4) The use of the split ring and double catch for attaching the two shelter halves together eliminates the buttons used on the present shelter. The ring and catch fittings allow both sides of the lap at the peak of the tent to be fastened, adding to the shelter's strength, and further eliminates leaks in the tent such as afforded by buttons.

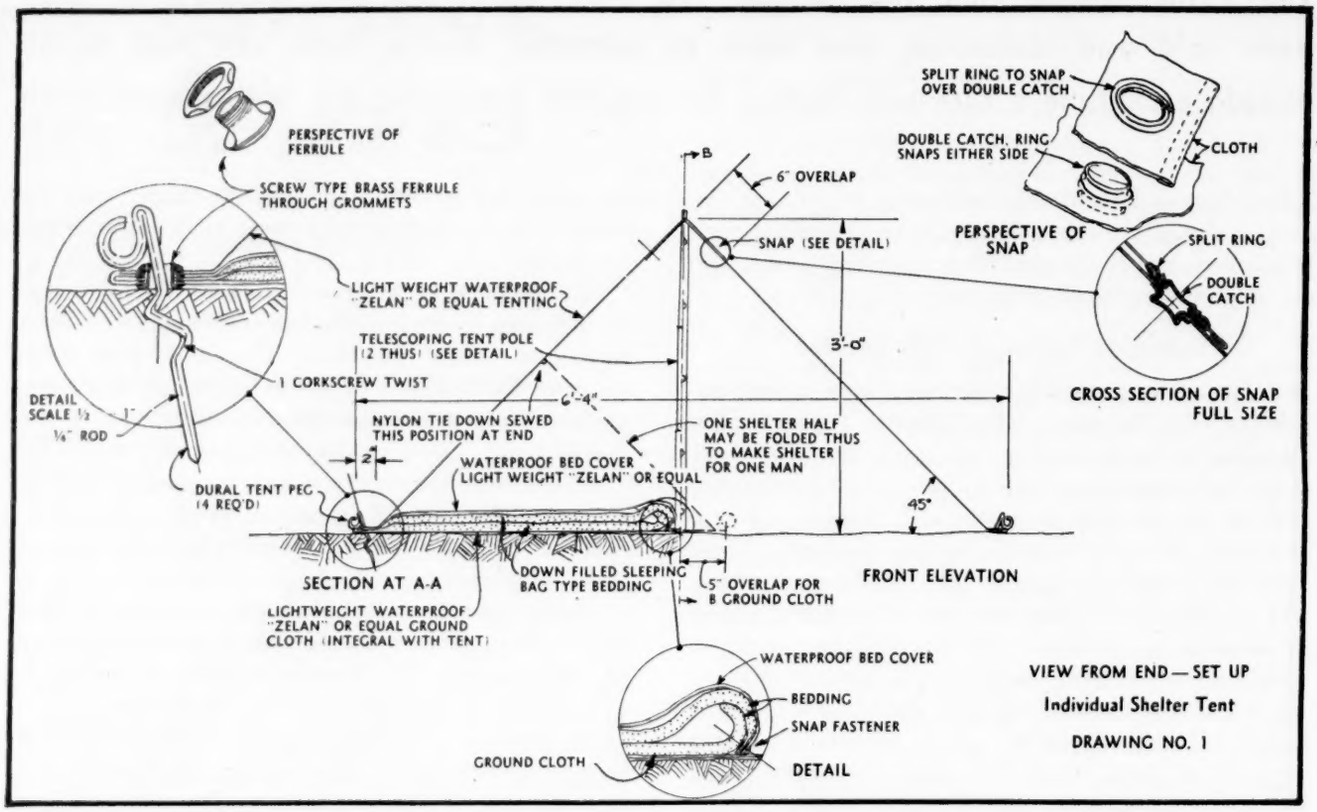
(5) The design of the tent pegs eliminates the need for short lengths of rope used as ties on the shelter now in use. The proposed pegs can be hammered into the earth without damage. The corkscrew twist allows a better hold to the soil. On surfaces where the pegs cannot be driven on screwed, two or more shelters may be moved together and anchored together by interlocking the loop ends of the pegs, after twisting them through the tent ferrules.

(6) The bedding cover of waterproof material is a necessary item to keep the bedding from getting wet from breath condensation and precipitation. This piece covers the entire bed and its top flap may be folded over the sleeper's head to provide more protection from the elements.

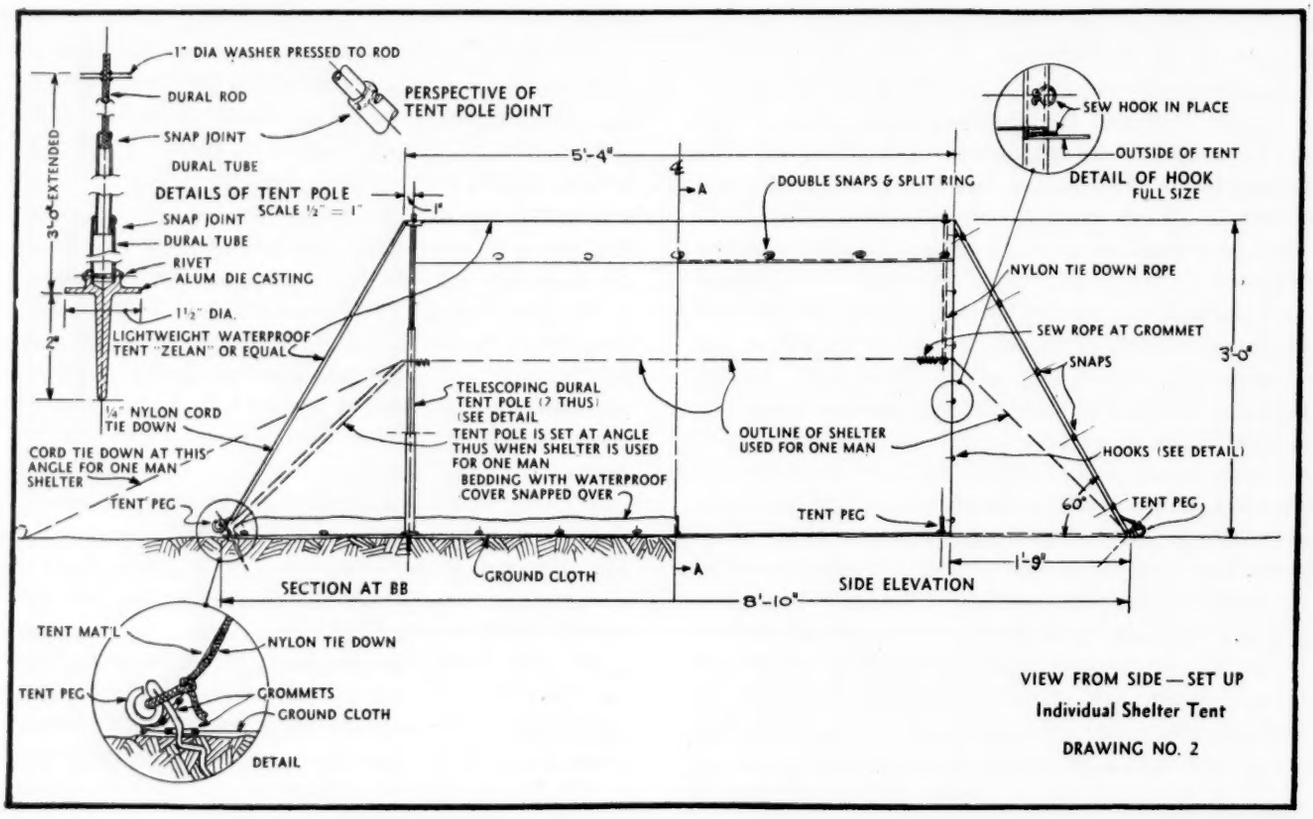
(7) The shelter tent portion of the structure has the end tie-down ropes sewn to it. This eliminates loss of this necessary item. Also, this cord is made of nylon similar to parachute shroud lines and has less bulk and weight than that presently in use.

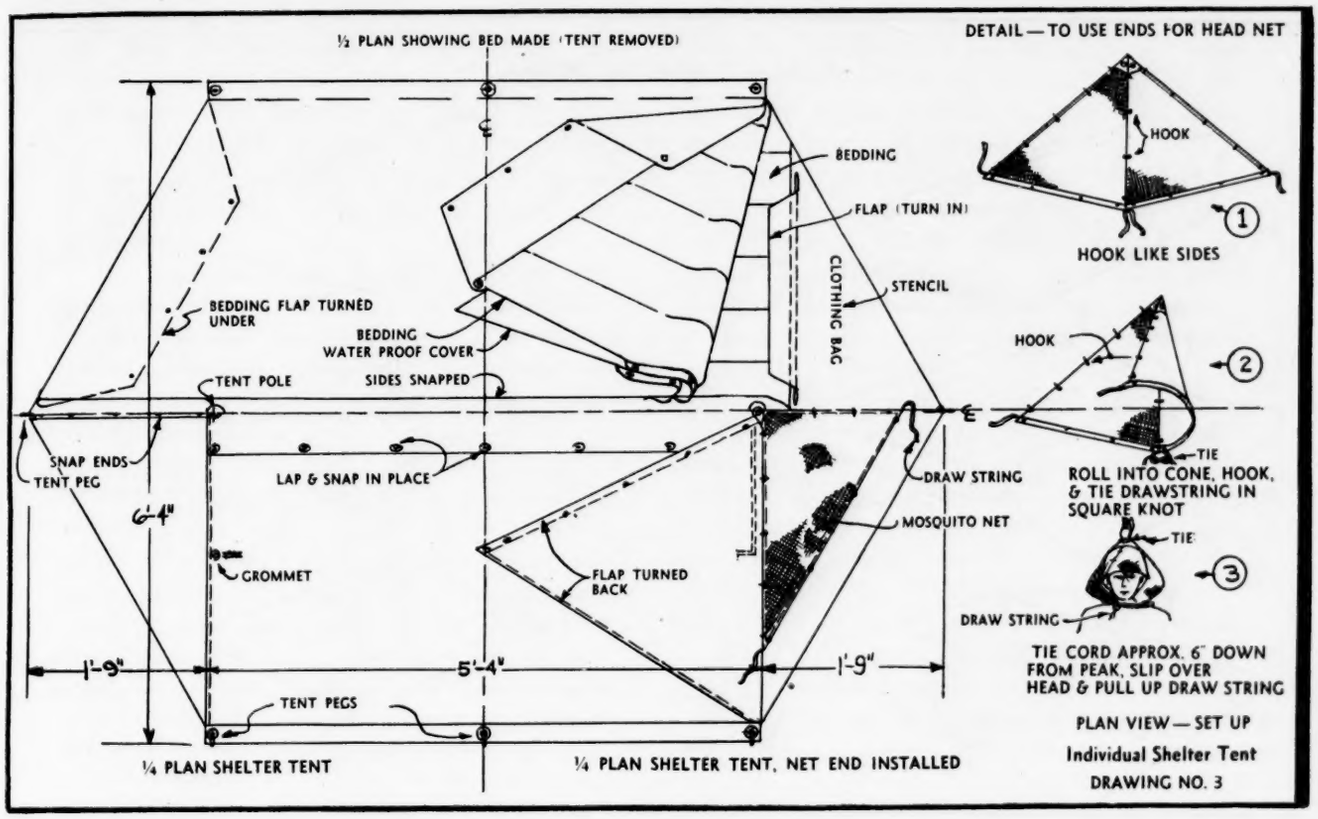
(8) The design and placement of the tie rope allows the tent to be used as a complete shelter for a man operating alone. The half shelter is not an ideal arrangement, but is better than a poncho for giving protection.

(9) The bedding has definite advantages over the zip-

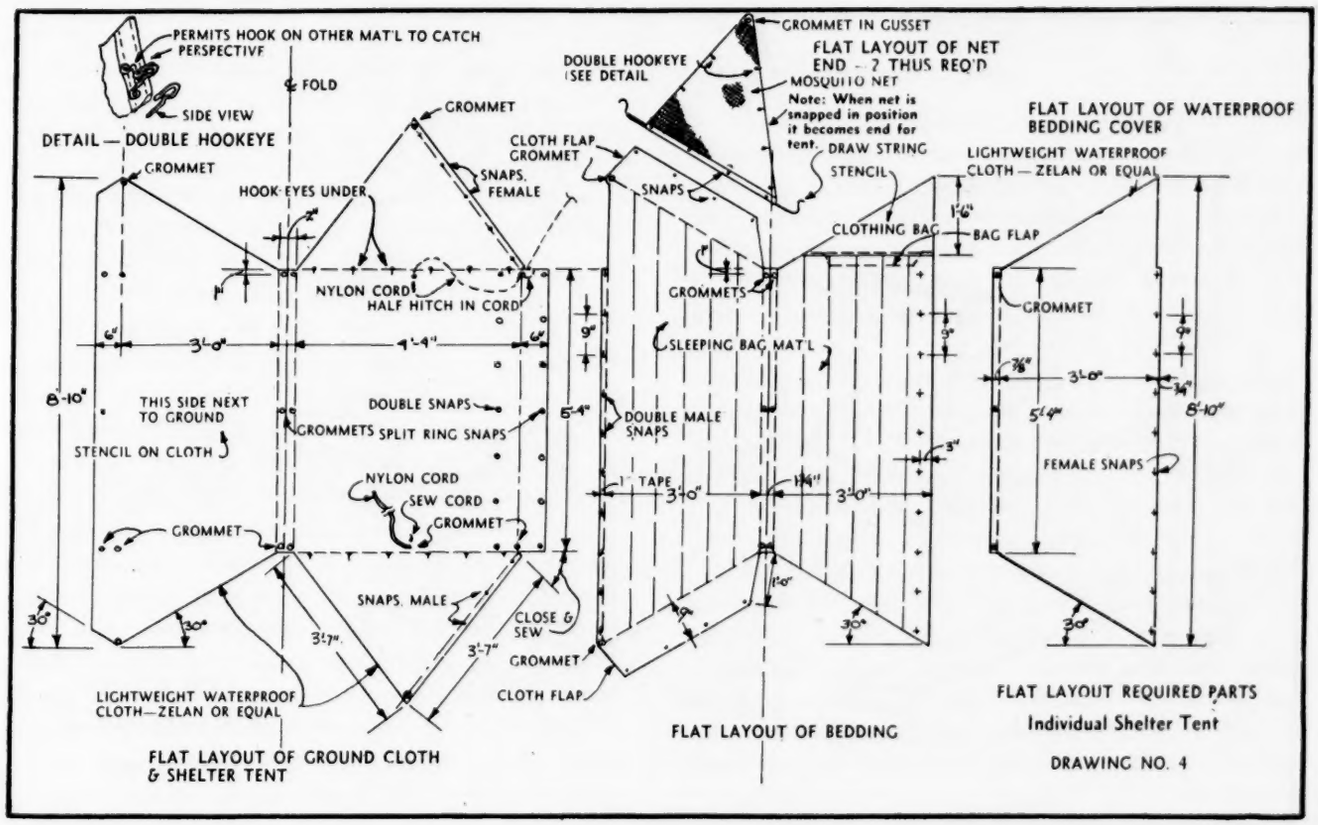

PERSPECTIVE OF FERRULE
SCREW TYPE BRASS FERRULE THROUGH GROMMETS
LIGHT WEIGHT WATERPROOF "ZELAN" OR EQUAL TENTING
TELESCOPING TENT POLE (2 THUS) (SEE DETAIL)
1 CORKSCREW TWIST
DETAIL SCALE ½ = 1"
¼" ROD
DURAL TENT PEG (4 REQ'D)
NYLON TIE DOWN SEWED THIS POSITION AT END
WATERPROOF BED COVER LIGHT WEIGHT "ZELAN" OR EQUAL
ONE SHELTER HALF MAY BE FOLDED THUS TO MAKE SHELTER FOR ONE MAN
6" OVERLAP
SNAP (SEE DETAIL)
3'-0"
6'-4"
45°
SECTION AT A-A
DOWN FILLED SLEEPING BAG TYPE BEDDING
5" OVERLAP FOR B GROUND CLOTH
LIGHTWEIGHT WATERPROOF "ZELAN" OR EQUAL GROUND CLOTH (INTEGRAL WITH TENT)
FRONT ELEVATION
SPLIT RING TO SNAP OVER DOUBLE CATCH
DOUBLE CATCH, RING SNAPS EITHER SIDE
CLOTH
PERSPECTIVE OF SNAP
SPLIT RING
DOUBLE CATCH
CROSS SECTION OF SNAP FULL SIZE
WATERPROOF BED COVER
BEDDING
SNAP FASTENER
GROUND CLOTH
DETAIL
VIEW FROM END — SET UP
Individual Shelter Tent
DRAWING NO. 1

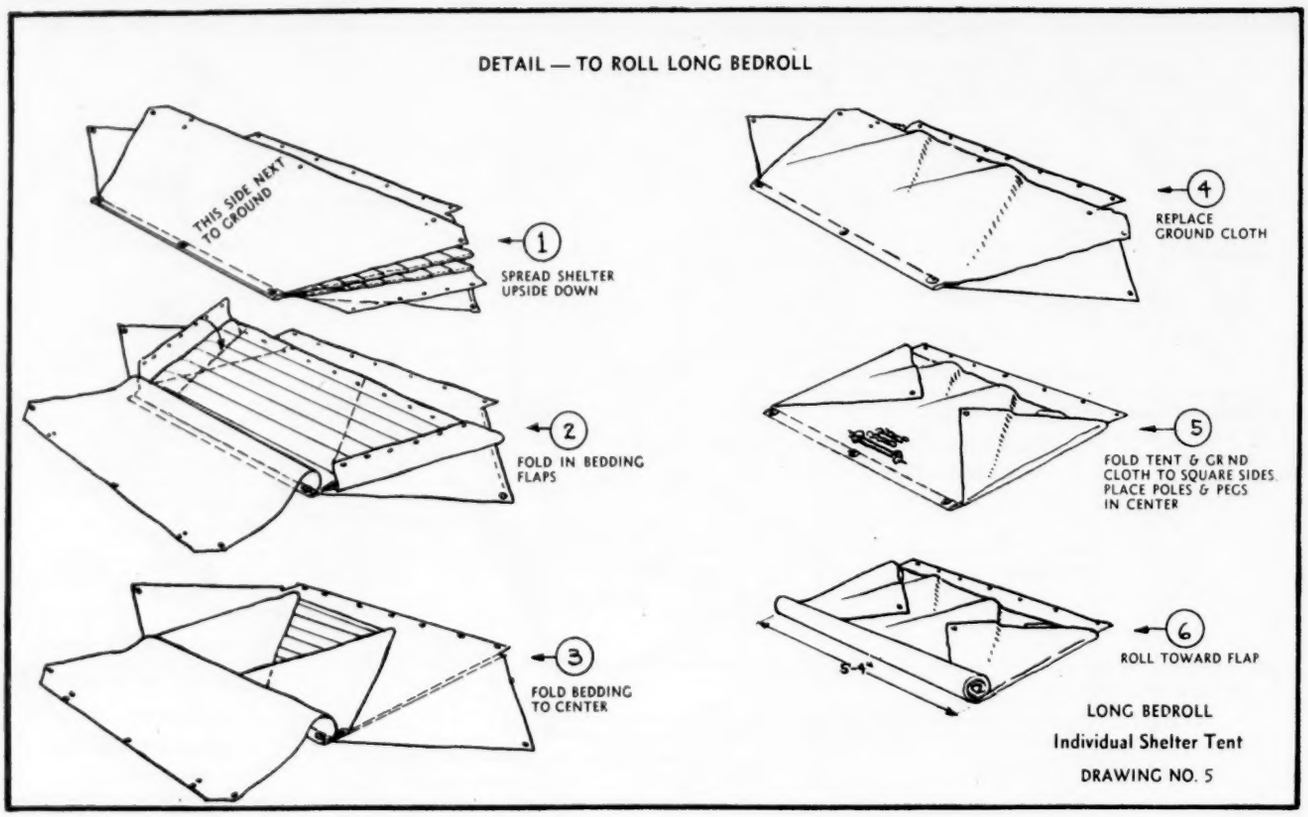
The sleeping bag should be fabricated of the same weight and type material as used in the Navy aviator's sleeping bag. Ground cloth affords sleeper protection from wet or frosted earth.



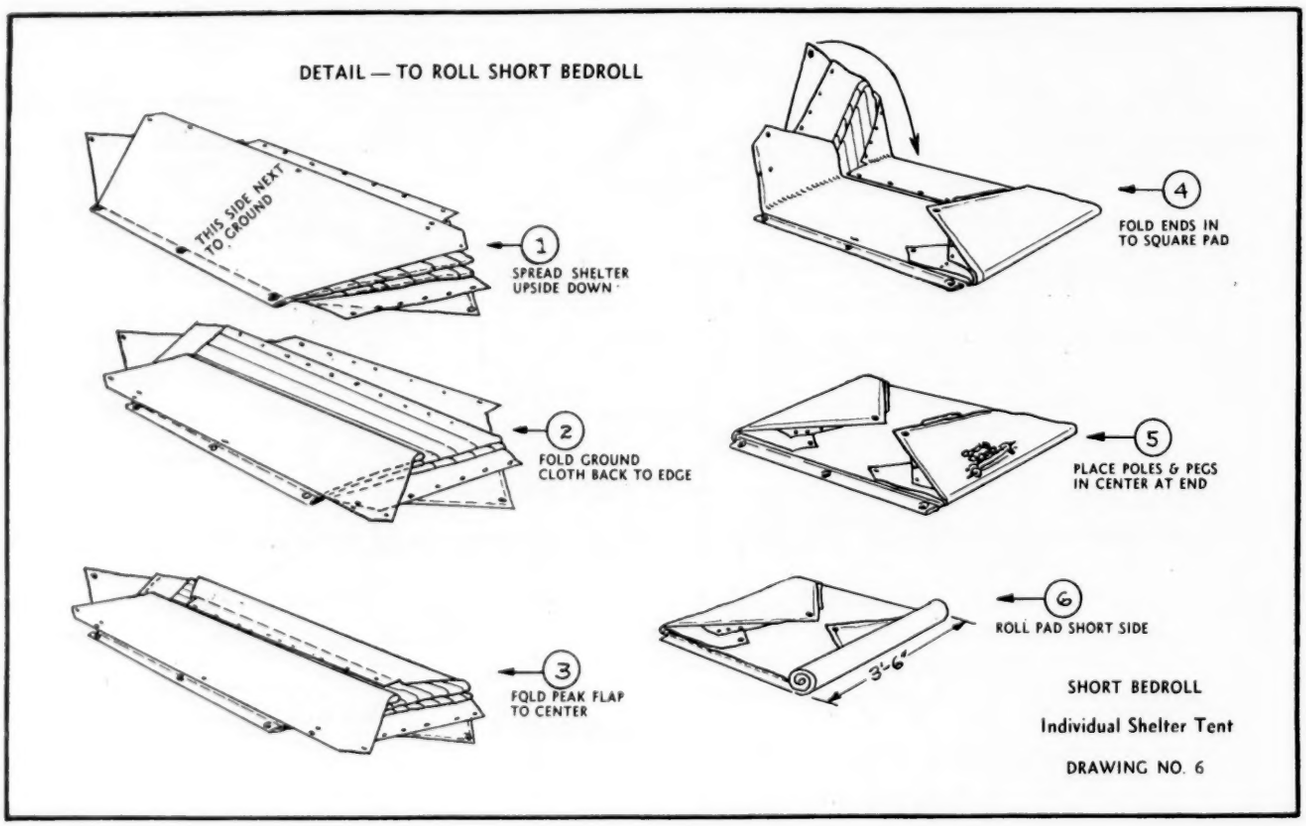


Two triangular pieces of net, with double hook-eyes, can be provided for use in malaria-ridden areas. This eliminates the inclusion of a standard net in a man's equipment for malarial areas.





If light materials and the standard sleeping bag filling are used, the shelter can be easily rolled to the size of the required short or long bed roll. Design is very acme of simplicity.



THE UNITED STATES, GREAT BRITAIN, AND Canada signed an agreement recently on the standardization of the American and British system of screw threads. The accord results from more than 30 years of effort aimed at making threaded products manufactured in the three countries interchangeable.

This standardizing of the threads of our common nuts and bolts will allow in any future military operation greater interchangeability of equipment between nations than possible in the last war and the effect this will have on logistical support alone will be tremendous.

The unified screw thread standard will have a 60° thread angle, the same as the American (National), and a slightly rounded crest and root, which will resemble a modified British (Whitworth) thread profile. The minor details which may differ will be the classification and tolerances of the screw thread fits. These minor differences will not, however, prevent interchangeability of threaded parts.

The idea for an international agreement to standardize the screw thread is not a new one. Since 1918, representatives of the United States, Great Britain, and Canadian governments and industry have been holding periodic conferences to devise an acceptable thread agreement.

It was not until the conference in 1945 that the countries agreed upon a unified form of thread having a 60° angle, together with standard sizes and pitches. It required about three years before basic mathematical formulae were developed for classes or grades of fit and corresponding tolerances and allowances.

The equipment to be affected first will probably be the latest ordnance and transportation equipment of which only pilot models are presently available and where production has not yet started. This unification of a screw thread can well lead to further standardizing of weapons, various types of aircraft parts, and other vital war equipment. If a future emergency ever arises, military strategists will no longer have to rely on limited dispersion of vital industries within the boundaries of their own nation for Allied nations will be able to supply parts that also fit.

GWR

per type sleeping bag, as it may be unsnapped, removed, and laid completely flat for airing or cleaning. It is felt that heavy snaps would be far more serviceable than a zipper.

(10) It will be noted that provisions for net ends on the tent have been provided. Two triangular pieces of net, with double hook-eyes, can be provided for use in malaria-ridden areas. These pieces are snapped to the flaps on the bedding and hooked to the shelter to allow air circulation and mosquito protection in warm climates. The sleeper would use the bedding cover ground pad and sleep either over or under the bedding cover.

(11) The two pieces of net can be hooked together to form a head net when not in use on the tent. This eliminates the inclusion of a standard head net in a man's equipment for malarial areas.

(12) The bedding flaps mentioned in paragraph ten above provide a seal at the foot of the slepping bag, when net ends aren't used, by tucking under at the foot.

(13 The upper portion of the sleeping bag is provided with a clothing bag. This allows articles of clothing, such as the jacket M1943, removed for sleeping, to be rolled and kept both warm and dry for wearing upon arising. Any clothing properly placed in this bag would serve as a pillow for the sleeper.

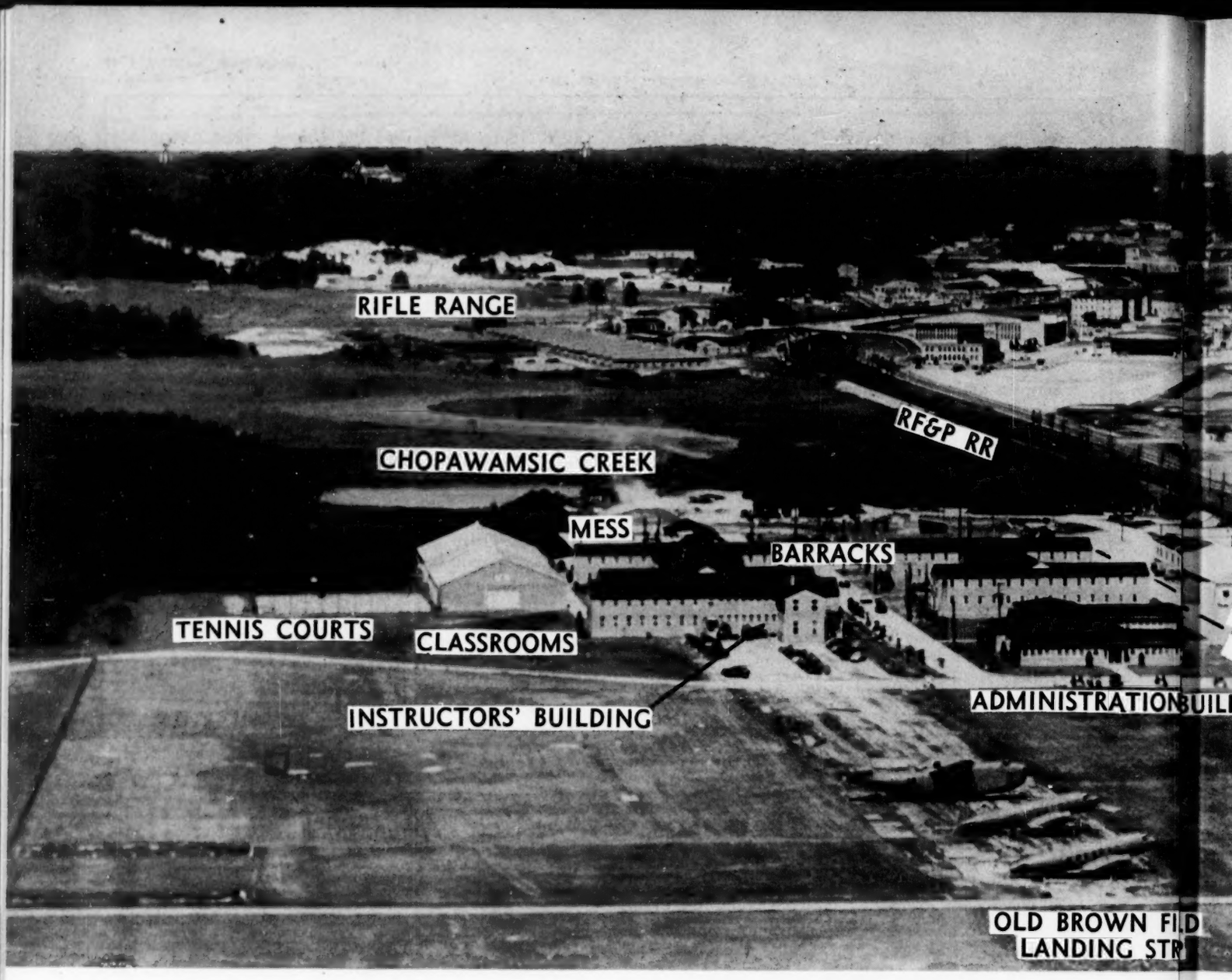
(14) The redesigned tent pole of tempered aluminum cuts down weight and will prove to be sturdier and better suited for its job. Its proposed construction is very similar to that used on most present day automobile antennae. It is made to telescope and lock into place when extended. The pole has one intermediate position, partly extended, for use when the shelter is used by one man operating alone.

(15) The entire shelter can be assembled and disassembled through the use of the screw type ferrule with grommets at the mounting edge of each component part. This disassembly allows cleaning, washing, repairing, and airing for each part. Conversely, the assembly of the entire shelter into one unit eliminates losses of small parts of the equipment which tend to render the present shelter useless.

(16) The drawings show the steps necessary to roll the proposed shelter into a bed roll for use with the pack. It is felt that, if light materials and the standard sleeping bag filling are used, the shelter can be easily rolled to the size of the required short bed roll. The long bed roll should present no problems to the new design.

Examination of the accompanying drawings, which are necessarily detailed, will reveal this shelter to be both simple and inexpensive to construct. It does away with the use of blankets and other makeshift gear, and should add immeasureably to morale through its comfort and build the combat efficiency of those using it through elimination of fatigue brought on by losses of sleep.

to be concluded



The Basic School

THE BASIC SCHOOL IS PART OF THE MARINE CORPS Schools organization at Quantico under the command of the Commandant, Marine Corps Schools. The academic direction of the Marine Corps Schools is under the Assistant Commandant, Marine Corps Schools. The commanding officer of The Basic School is charged with the execution of the mission assigned the school and prescribed academic policy.

The *mission* of The Basic School is "To train newly commissioned lieutenants in the duties and responsibilities of Marine officers, ashore and afloat, with emphasis on the duties of an infantry platoon commander."

The *curriculum* of The Basic School is designed to accomplish its mission by providing the students with an adequate and substantial foundation of leadership and professional ability upon which they may continue to build their Marine careers. It is not anticipated that graduates of the school can go to their next duty assignment and perform all their duties with perfection. It is expected that they can and will acquit themselves creditably; that as they combine the training received during their course with continued study and the daily school of practical experience, which can only be gained in the actual performance of assigned duties, they will become

By Col Edward W. Snedeker

well qualified leaders, capable of accomplishing any normal combat or administrative task with a high degree of competence.

In the April 1948 issue of the MARINE CORPS GAZETTE, 2dLt William A. Reavis, who at that time was a student in The Basic School, in an article *Why Not a Marine Corps Academy*, advocated establishment of a Marine Corps Academy. It was *not* his purpose, so he stated, to be recklessly critical of the present training program for officers. However, he was very careless in distinguishing fact from personal opinion. If he would combine a facility for diligent and accurate research with his ability to express himself, his advancement of new ideas would merit the attention they have received. The Marine Corps is, and should always be receptive to new and sound ideas. Sound ideas must be based on facts and experience, not on fanciful imagination or equivocal suppositions.

Mr Reavis' article and a subsequent article from his prolific pen, *Why Not a Marine Corps Drill Manual*, have both elicited considerable comment. It is apparent from letters to the editor and articles in rejoinder appearing in the GAZETTE, that at least some readers are laboring under a misapprehension that these contentious articles represent doctrine or teachings of The Basic School and/or the general opinion of most of his classmates. Such conclusions are not justified.

It is my purpose in this article to clarify the mission, methods and curriculum of The Basic School to remove any such misapprehension. In order to do this it is necessary to discuss certain statements made in Mr Reavis' article and in Col Hudnall's *A Reply to Mr Reavis* in the July GAZETTE. Col Hudnall is curious as to "How many of his contemporaries share Mr Reavis' views?" This is a fair question and fortunately it can be answered with a high degree of accuracy.

Sixty of 85 Basic School contemporaries of Mr Reavis remained at Quantico after graduation to assist in the Platoon Leaders Class and Naval ROTC summer training programs. The presence of these classmates afforded a unique opportunity to check on their opinion, through a questionnaire, of the salient features of both Mr Reavis' proposal and Col Hudnall's reply. The classmates were free to reply to the questions in any way desired and to make any comment of any kind considered pertinent. The class was composed of 15 officers from the ranks, 32 from the Naval Academy, 30 from the Naval ROTC program, and eight commissioned directly from college. Their opinions will be referred to later.

According to Mr Reavis' article, establishment of a Marine Corps Academy would develop a new cohesion and solidarity within the Corps, sincere faith in our service, and establishment of the Corps in the minds of the American people. The assumption is that these highly valued attributes of the Corps are now losing their vitality. I must disagree with any contention that a Marine Corps Academy is needed to perpetuate these requisites in the future any more than it was necessary in the past. In my opinion there are few marines, or ex-marines or members of other services who will not agree that there is a remarkable cohesion and solidarity within the Corps; marines certainly have an intense faith in their service, and there seems to be a general affection for marines in the minds of at least a considerable portion of the American people.

None of Mr Reavis' 60 classmates considered a Marine Corps Academy necessary. Twelve considered such an institution desirable or meriting consideration, 47 stated

Col Edward W. Snedeker, commanding officer of The Basic School since June, 1946, attended that school himself some 21 years ago following his graduation from the Naval Academy. Command of the 7th Marines on Okinawa climaxed a WW II career which included the original landing on Guadalcanal and subsequent bitter fighting, Vella Lavella, and Bougainville. The Colonel's pre-war foreign tours in Nicaragua and Haiti bring his overseas time up to a grand total of seven years, or just under one third of his total service. As Signal Officer of the 1st Division and G-3 of 1st MAC, he collected the Silver and Bronze Star, and the Commendation Ribbon. For Okinawa, he received the Navy Cross.

it was undesirable, and one failed to answer. Two thought the Marine Corps lacked cohesion and solidarity. One attributed the cause to the post-war transition period, and the other to the shortage of housing at posts and stations. Four stated improvement could be made. All except one stated that they had a sincere faith in the Marine Corps. The one exception expressed himself as having only half-hearted faith in peace time but sincere faith in war time.

IT IS CLAIMED that establishment of a Marine Corps Academy would result in much publicity and, further, would solve the recruiting problem. The activities of the academy would excite "waves of interest" over the country. This publicity in turn would presumably cause the doors of Marine recruiting offices to be crowded with young men inspired by and seeking the opportunity of serving under the dynamic graduates of the academy. It is further claimed that both West Point and Annapolis play a large part in Army and Navy recruiting. It is difficult to see why, if his thesis is correct, it has been necessary for a draft law to be enacted. West Point and Annapolis are certainly well and glamorously publicized. The cadets and midshipmen have snappy uniforms. Academy athletics, especially the Army-Navy game, and graduation week are noteworthy events. Nevertheless, I doubt if all this has much effect in gaining the active support of Mr Average American for enlistment in the respective services.

The article asserts that, in addition to all the benefits mentioned above, "The second and major mission of a Marine Corps Academy would be to provide a comprehensive, four years indoctrination into officership." The institution would not be like the Naval Academy or West Point, nor would it be a civilian college, nor a miltiary training program in a civilian college. Professionally, it would be military, but academically it would be civilian. It would be under a military superintendent. Each officer candidate would choose his own academic major, but the professional subjects would be standard, routine and required. It should aim at "a lessening of military austerity and an enlarging of undergraduate interests." Personally I am unable to determine from this hodge-podge of words just what the proposed academy would be. My best guess is that it would be a modified form of the Naval Academy with semi-military restrictions reduced so as not to interfere with student "undergraduate interests."

THE ARTICLE further affirms that our new second lieutenants know absolutely nothing about either the Marine Corps or the technique of being an officer. This is certainly true of some. However, many of the newly commissioned student officers of The Basic School come from the Naval ROTC, the enlisted ranks, the Platoon Leaders Program, or the Naval Academy. Many have had more service in and know considerably more about the Marine Corps than did the author when he wrote his academy article. The present class at The Basic School consists of some 294 students from the following sources:*

Enlisted men (LI 1385)
NROTC
Transfer Program (MCR to MC)
Meritorious Noncommissioned Officers
Naval Academy
Platoon Leaders Class
Civilian College Graduates

The article also asserts that through an academy, a man could "prove himself capable of an officership through an earnest study of the principles of command, and then be commissioned." No man can prove himself capable of officership by study only, and no man can be considered a qualified leader until he has passed his final test, his acceptance of such by men under his command. The academy or school can only provide a foundation upon which the officer may build a successful future.

Col Hudnall ably replies to certain contentions of Mr Reavis relative to the Naval Academy as being a poor source of Marine officers. I have no argument with his defense of that institution. However, the colonel leaves the Naval ROTC and enlisted ranks, as sources of Marine officers, in the disparaged state to which they have been relegated. For over two years I have had the opportunity of observing our newly commissioned officers in The

*See also LI 1593.

Primary purpose of The Basic School is to provide new second lieutenants with an adequate foundation of leadership and professional ability. The author explains how the school accomplishes this mission in a rebuttal to Mr Reavis

Basic School. Through proper selection at the various sources the Marine Corps is assured that the men to whom it offers commissions have the basic physical, mental and moral qualifications needed to develop into a good officer. If any screening errors are made they will be discovered during the course at The Basic School. Class records show that no particular source of officers entering the Marine Corps has any special significance in the relative achievements of the student officers. All sources have contributed their share to the effectiveness of the Marine Corps.

IN MY OPINION, it is unnecessary to go to great lengths to justify the officer procurement system of the Marine Corps. The bitter criticism of officers and of the so-called "caste system" that broke out after conclusion of the recent war was, to a considerable extent, an indictment of a lack of human understanding in military leadership of civilians in uniform. Some of the criticism was simply "letting off steam" by those who were no longer under the restraint of military discipline. Much of the furor was directed toward the graduates of the two service academies. It even led to serious though ill considered proposa's to abolish the academies. There is no question but that the academies have and will continue to make a prime contribution to our national defense.

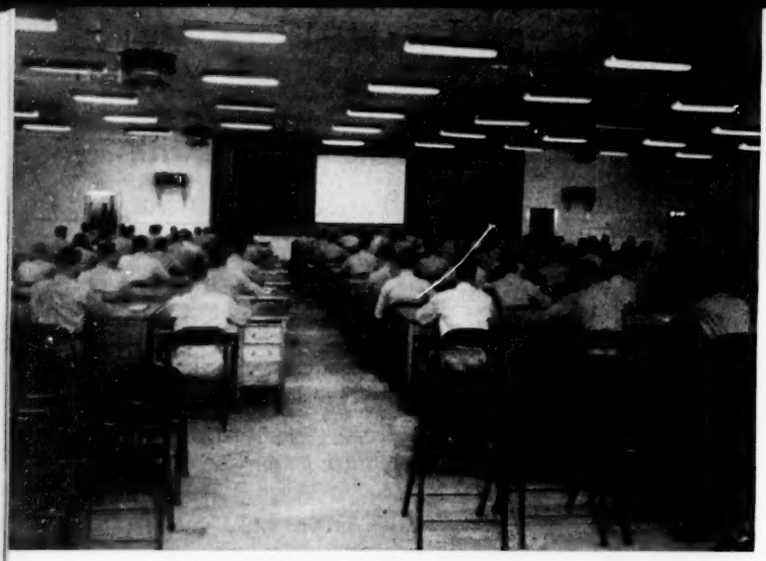
During this turbulent period, the halls of Congress resounded with criticism of officers. Daily the press of the country headlined articles about the "caste system" and "brass hats." It was the popular thing to castigate the "brass." During this same period, however, one may easily find tribute to Marine leadership, but has to search diligently for criticism. To me this fact vindicates the Marine Corps officer procurement sources. It is the best possible proof that varied sources contribute to and complement each other in developing a practicable, competent, understanding, and mutually esteeming officer-enlisted leadership relationship that is unequalled. I will add that it also is proof of the soundness of the basic training and indoctrination given young officers of the Marine Corps.

Thirty-four of Mr Reavis' classmates considered all of the present sources of Marine officers adequate, while the other 26 thought certain sources, but not their own, inadequate. General comment was that it was not the source, but the individual himself that counted; that each source is adequate provided initial selections are carefully made.

Col Hudnall further observes that Mr Reavis is more than a bit befuddled when he states that "only part of a marine's career has anything to do with the sea." If the lieutenant's three years at the Naval Academy and the course at The Basic School have not indelibly implanted a continual association of the Marine Corps with the sea then he is less perspicacious than I believe and his article warrants much less attention than it has received. Let us rather assume that the author has exercised a degree of poetic license to lend substance to the idea he advocates. This he has done in other instances, as when he implies The Basic School requires students to run to formations. Students are required to be at classes, to be ready to leave for the field, or to be in formation for drill or troop inspection at the times prescribed in the daily schedule. Sometimes, due to a tight schedule, a student must run to be on time, but even this will rarely happen if he has not been struck by bunk fatigue and delays until the last minute. In general, Reavis' classmates attributed most of the running they had to do to their own carelessness.

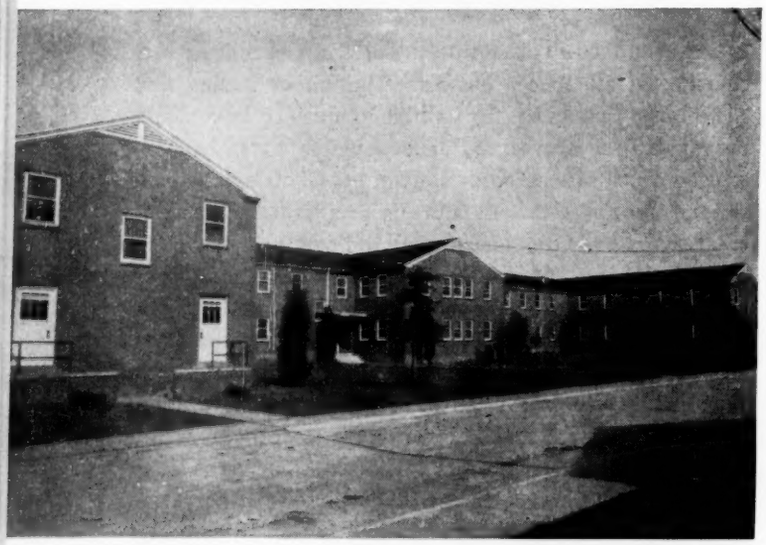
Relative to married students, Mr Reavis is expressing his personal opinion when he claims the married student's "mind is not focused on the technique of Marine warfare." Class statistics show that married students of The Basic School, as a group, have attained a higher class average than unmarried students. The three graduates with highest class standing in the last class were married. It seems that it is at least just as difficult for the average young unmarried man to turn his full energies toward his professional studies as it is for the married man.

AFTER SOME EIGHT MONTHS as a student in the Marine Corps, Mr Reavis has no hesitation in finding that "The Basic School makes its biggest mistake in attempting to subject our second lieutenants to a prep school scheme of education." Only four of his 60 classmates considered The Basic School course a prep school scheme of education. In the dictionary sense of "making ready or fit for a particular purpose" The Basic School is a prep school. But there are also points of similarity between The Basic School and the service academies, preparatory schools, postgraduate schools, recruit drills, or almost any type educational institution or form of military training. Inspections, drills, and being prompt at formations are not peculiar to cadet training. They continue right along through an officer's career. In my opinion the barracks-like quarters in which students live is the fundamental reason why some feel they are living in a prep school or cadet-like atmosphere. This condition will continue until



Two large classrooms of temporary type sheet metal are immediately adjacent to the students' quarters.

Basic School students have their own closed mess. Table arrangement provides wardroom atmosphere.



Two standard type barracks are provided as living quarters. New bachelor quarters have been planned.

a suitable BOQ is provided. Perhaps the difference between cadets and student officers in The Basic School is most apparent by the differences. Student officers do *not* have to get up or turn in at set hours; there are no meal formations; there are no prescribed study hours, though it behooves the student to study; students may marry and if married may live at home; they may wear civilian clothes whenever other officers may wear them; and their liberty and recreational privileges are the same as those of any officer.

I am somewhat surprised that Col Hudnall, who finds Mr Reavis befuddled in some things, proceeds to accept at face value and agree with that author's thesis of cadet-like treatment and impressions of school boy approach and excess of NCO types of training in The Basic School. Without question, these impressions are given, but here again, the author's enthusiasm for a Marine Corps Academy is father to a choice of words that result in impressions which do not agree with the facts. Being a Naval Academy graduate he knows there is little real similarity between the treatment of student officers of The Basic School and midshipmen of the academy, who, we may consider, lead a cadet-like life.

Twelve of Mr Reavis' classmates expressed the opinion that methods of The Basic School are cadet methods of training, primarily because of the barracks type living accommodations, while 36 answered in the negative, and 12 made miscellaneous comments.

When members of the last graduating class were asked to comment on Col Hudnall's assertion that "The school boy approach does nothing to dissipate the infantile pose of its students; and the value of an excess of NCO types of training is open to question," the charitable condensation of remarks was that the colonel did not know what he was talking about.

If, by "school boy approach," it is meant that students are closely observed and their leadership characteristics evaluated, then I am happy to confirm the truth of the accusation. Evaluation of student leadership characteristics is continuous during the course and is based on demonstrated individual performance in the field, in classrooms, in barracks during routine school hours, and at drills and ceremonies. The primary purpose of this evaluation is to assist the student in improving his leadership ability. No one stands over him with a rod or bayonet or threatens him with punishment to exact improvement. As an officer he is expected to display initiative in attaining the highest professional qualifications of which he is capable.

IN THE LAST CLASS the average time actually allocated to drill averaged about one-half hour per day. The main objective of drill in The Basic School is to give the student instruction in drill, and through application, practical experience in command positions during drills or in

functions he may be assigned in various ceremonies. Some 1100 hours of instruction were allocated to 60 other subjects. This hardly supports the colonel's remarks about excess NCO types of training, if drill is what he meant by his remark.

Mr Reavis feels, or perhaps it would be more accurate to say imagines, that when the student lieutenants have to stand inspections, drill, arrive at formations on time, and do other things that enlisted men have to do, that it derides their rank in the eyes of enlisted men and of other officers; that it makes the rank of second lieutenant signify adolescence and inexperience. Should it be granted that his contention is true, I am sure that the rank of a newly commissioned second lieutenant will rarely signify full maturity and experience even were there a Marine Corps Academy. However, except for a few students, I have yet to talk to an officer or an enlisted man who felt any such derision, or that the students were lowering their dignity in any way by drill, inspections or promptness. Instead the enlisted men seem to establish a closer bond of understanding with the junior officers because they have seen them undergoing certain common types of training. Very few actually have the opportunity to observe students of The Basic School.

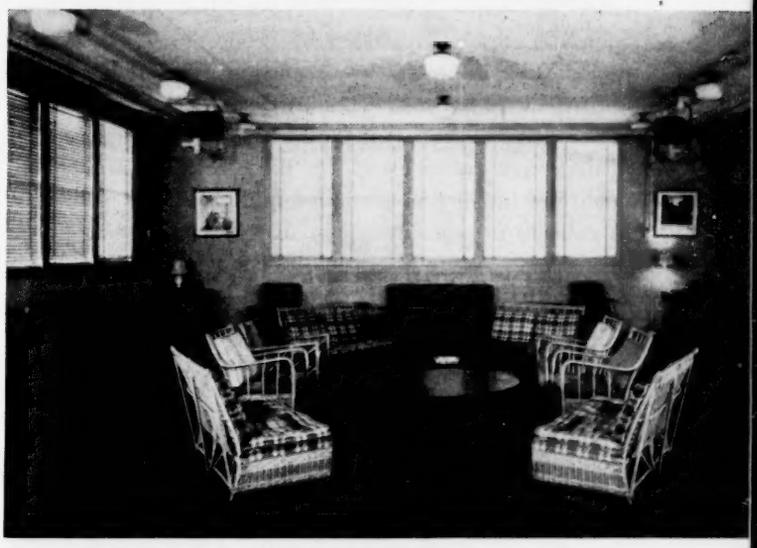
Forty-two classmates did not agree with Mr Reavis in his remarks about derision. Twelve agreed with him and the remaining eight agreed in part.

The claim is made that the program of The Basic School is inefficiently organized as to time and methods. This also is a matter of opinion. Over many years the Marine Corps Schools, as well as many other service schools, have found the lecture, demonstrations and application system to be sound and economical of students' time, particularly for basic military group instruction. The students are provided with study references and texts. They establish their own study program. There are many lectures. I frequently inspect classes, always unannounced. There is no question but that at times there are some students who doze or daydream. This has been known to happen in other schools and academies also. Considerable time is allocated to practical field demonstrations and applicatory exercises.

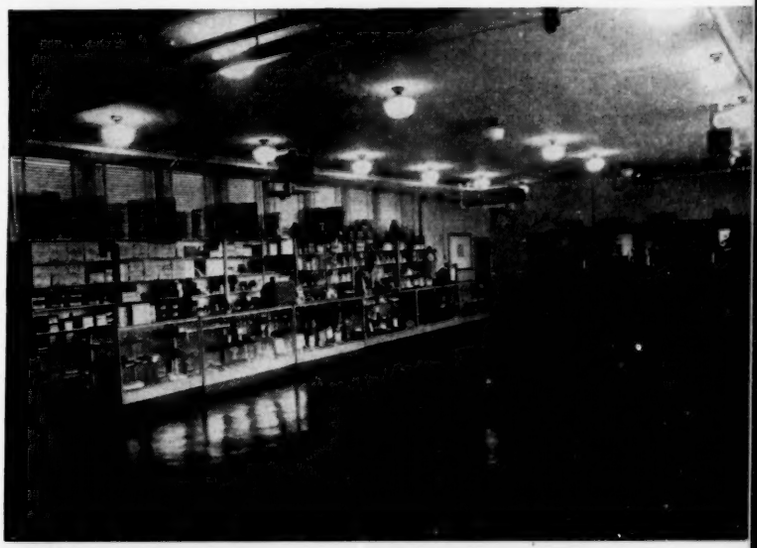
Six of Mr Reavis' classmates agreed with him that the course was inefficiently organized as to time and methods, 19 thought it could be improved in some respects, and the remaining 35 did not consider either the time or methods inefficiently organized.

There is always room for improvement in The Basic School or in any other institution or organization. Great improvements have been made in The Basic School since I attended it as a student in 1926-27, both in the methods of instruction, curricula and physical plant. Substantial impovements are continuing to be made. Each year the program, schedule, lessons, lectures, training aids, and field exercies are reviewed, revised or entirely prepared

Facilities for indoor and outdoor recreation are provided with improvements and additions scheduled.



The central recreation plant includes a reception room where the students may receive their guests.



A branch Post Exchange is housed in the recreation building for the convenience of new lieutenants.

anew. Students are given the opportunity to comment on their course prior to graduation and valuable observations are frequently obtained.

The staff of the school is changed approximately one-half each year. This insures a constant flow of experienced personnel with new ideas and prevents stagnation. The instructors of The Basic School are selected as carefully as practicable. They represent many years of Marine Corps service and a wealth of actual combat experience. They attend the Instructors' Orientation Course of the Marine Corps Schools for orientation in the principles and technique of instruction. It is not to be expected that the average instructor in a service school will have the polished technique, oratorical ability and platform manner of the experienced college professor, but what he lacks in this respect he makes up in his considerable practical knowledge and experience. Instruction in The Basic School is closely supervised by group chiefs. It is also periodically inspected by Academic Inspectors of the Marine Corps Schools. These inspectors cover all salient features and adequacy of the instruction. The concensus of the recent graduates of The Basic School was that the quality of instruction compared quite favorably with that of colleges or academies, but that the actual techniques of instruction were not generally comparable.

Next, the physical plant of The Basic School comes under fire by Mr Reavis and there is not much argument with him here. It has long been recognized that improvement is needed. A new Basic School building is in the Marine Corps Schools development plan. Adequate Bachelor Officer Quarters for students of The Basic School should be provided. Development of new facilities is, of course, dependent upon appropriations. The students do not live in barracks as a matter of principle but as a matter of expediency. Meanwhile the present physical plant is a considerable improvement over The Basic School installations in Philadelphia which many Marine officers well remember, and over its previous post war location in "D" Barracks at Quantico. Progress, though slow at times, is being made.

LASTLY, the charge is made that The Basic School is unable to produce the number of new second lieutenants every year which the Marine Corps desires. This, of course, is not a function of The Basic School, but of Marine Corps Headquarters. The present class consists of some 294 student officers. Present planning calls for a gradual increase to 500 by 1958. No difficulty is foreseen in meeting these requirements or a larger number if needed. There is no positive assurance that a Marine Corps Academy, established along the lines recommended, would guarantee, "due to the attraction which a service academy inherently possesses," the officers needed each year by the Marine Corps. It seems strange that the service academies have had post war difficulties in attaining the desired yearly input of midshipmen or cadets if this be true.

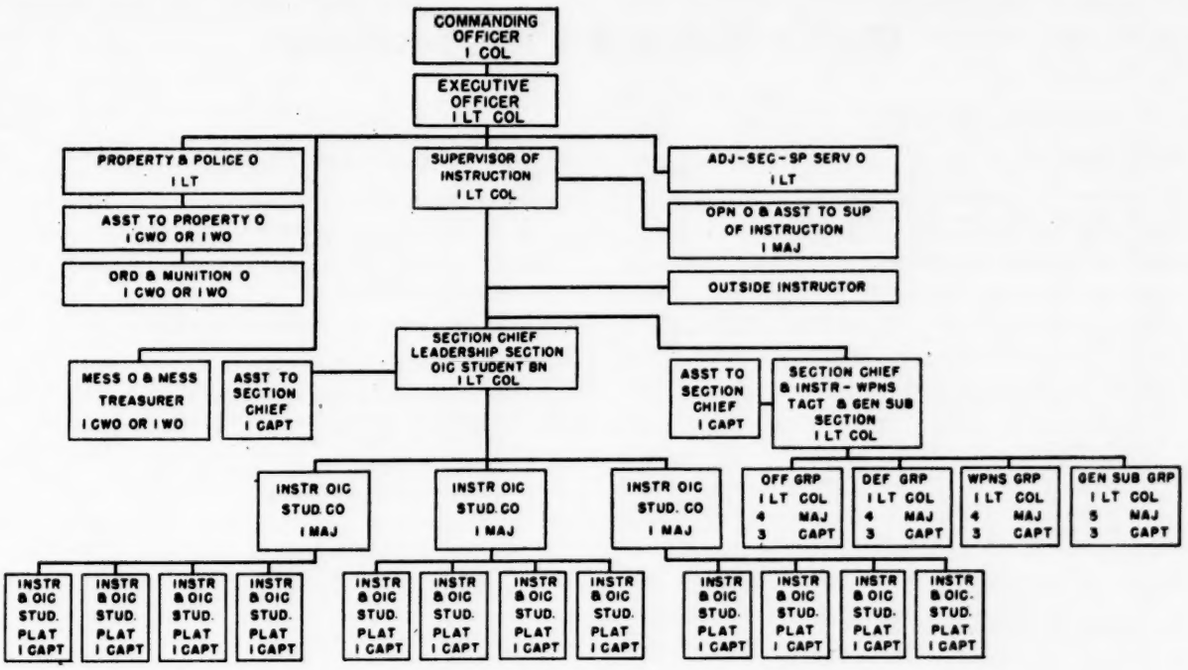
Col Hudnall, although admitting that he knows far too little of the courses and methods of The Basic School, does not hesitate to express a conviction that something is wrong. A conviction founded on an admitted lack of knowledge should more accurately be called a supposition. Mr Reavis and Col Hudnall have something in common in the way they arrive at convictions.

The colonel advances the idea "that the time at the school could be used more profitably by exposing them to facts of the career other than those of the infantry platoon." Neither the staff or ex-students of The Basic School have been able to determine what facts Col Hudnall had in mind that are not now included in the course, and that are more important than those of the rifle platoon.

IT DOES APPEAR that very few Marine officers or enlisted do have a clear comprehension of the post-war Basic School. This is not surprising, for The Basic School conducts no publicity campaign, has no famous athletic teams, and does not attempt to glamorize its activities. Some information about it should be of interest to all marines.

The Basic School is part of the Marine Corps Schools system at Quantico. It is now located in the old Brown Field aviation area to the south of the main installations of the post as may be seen from the photographs. The physical plant consists of two standard type barracks buildings for student officers, a mess building housing a new commissioned officers' mess (closed), an armory, instructors' building, and an administration building, all of brick construction. The administration building contains a central recreation room, record section, a branch post exchange, and a reception room. The record section maintains a small library of professional books for the use of students. Two large classrooms of temporary type sheet metal construction are immediately adjacent to the students' quarters. These classrooms leave much to be desired, but will serve the purpose until a permanent Basic School building is constructed. A 40′ x 80′ sheet metal building is to be constructed for use as a gymnasium. Two double quonset hut type buildings provide storage space for students' baggage and gear. .Two tennis courts are available and a handball court is planned for the near future. There is ample area suitable for playing softball, volley ball and other sports during good weather. Students are encouraged to participate in Marine Corps Schools and intra-mural athletics after school hours. The athletic and recreation facilities of the Quantico Commissioned Officers' Mess are available to all student members.

The student body of The Basic School normally consists of newly commissioned lieutenants. The current


COMMANDING OFFICER 1 COL
EXECUTIVE OFFICER 1 LT COL
PROPERTY & POLICE O 1 LT
ASST TO PROPERTY O 1 CWO OR 1 WO
ORD & MUNITION O 1 CWO OR 1 WO
SUPERVISOR OF INSTRUCTION 1 LT COL
ADJ-SEC-SP SERV O 1 LT
OPN O & ASST TO SUP OF INSTRUCTION 1 MAJ
OUTSIDE INSTRUCTOR
MESS O & MESS TREASURER 1 CWO OR 1 WO
ASST TO SECTION CHIEF 1 CAPT
SECTION CHIEF LEADERSHIP SECTION OIC STUDENT BN 1 LT COL
ASST TO SECTION CHIEF 1 CAPT
SECTION CHIEF & INSTR-WPNS TACT & GEN SUB SECTION 1 LT COL
INSTR OIC STUD. CO 1 MAJ
INSTR OIC STUD. CO 1 MAJ
INSTR OIC STUD. CO 1 MAJ
OFF GRP 1 LT COL 4 MAJ 3 CAPT
DEF GRP 1 LT COL 4 MAJ 3 CAPT
WPNS GRP 1 LT COL 4 MAJ 3 CAPT
GEN SUB GRP 1 LT COL 5 MAJ 3 CAPT
INSTR & OIC STUD. PLAT 1 CAPT

Organization of the Basic School

class is divided into two groups. The first group commenced the course on 7 September and the second group on 20 September. All second lieutenants commissioned in any calendar year have, by law, the same date of rank as the date of graduation of midshipmen from the Naval Academy in that year. The precedence among newly commissioned officers is determined by the Secretary of the Navy, upon their being commissioned, in accordance "with their demonstrated performance regardless of the source from which prescribed." Therefore, the actual precedence of each student is fixed by his pre-commissioning performance and is not affected by his record as a student in The Basic School. His student performance is, of course, used as the basis for the marks and comments on his fitness report submitted at conclusion of the school year. The revocation of commission of any student officer who fails to complete satisfactorily The Basic School course is recommended to the Commandant of the Marine Corps.

The Basic School is headed by the commanding officer and is organized functionally as shown above. The number of student platoons and companies varies with the student strength. The complement of the school consists of 58 officers, 3 warrant officers, and 148 enlisted.

In addition to conducting the course of instruction, The Basic School is charged with the preparation and/or review of certain assigned publications, texts and training films, the planning and preparation for the Naval ROTC and Platoon Leaders Class summer training programs, the presentation of all instruction except drills and ceremonies to the PLC classes, and the entire conduct of the NROTC training. These collateral assignments are, in themselves, tasks of considerable magnitude. This year there were some 1500 Platoon Leaders Class and 23 Naval ROTC officer-candidates. A large number of both groups is expected next year.

The Basic School course is approximately nine months long. It commences in September and ends in June. It consists of two main divisions: *Leadership Evaluation and Development*, and *Military Training*.

Leadership Evaluation and Development

The great need of any military organization is for competent leadership, for leaders who through ability, professional knowledge, human understanding, justice, physical fitness, example and devotion to duty will be worthy of leading young Americans. With few exceptions any young man who has undergone the process of selection for a commission has the fundamental qualities needed to become a good leader of Marines provided he makes a conscientious effort. Leadership qualities usually require considerable development. There are few born leaders. It is a primary responsibility of The Basic School to develop the leadership qualities and abilities of the young officers commencing their Marine

Basic School Curriculum

SUBCOURSE AND SUBJECT	HOURS DAY	HOURS NIGHT
I. BASIC WEAPONS	170	4
The purpose of this subcourse is to familiarize the student with the mechanical functioning and technique of fire of weapons organic to the infantry battalion.		
General	1	
Rifle	6⅓	
Carbine	5⅓	
Pistol	2⅓	
Automatic Rifle	15	
Technique of Rifle Fire	17	
Grenades	5½	
Rocket Launcher	2¾	
Flamethrower	3¾	
Demolitions	13½	
Mines and Booby Traps	8½	4
Machine Guns	46	
Mortars	43	
II. INDIVIDUAL TRAINING	199	7
The purpose of this subcourse is:		
1. To familiarize the student with highlights of U. S. Marine Corps history; the traditions, customs and courtesies of the naval service; general organization of the U. S. Marine Corps; and the evolution of U. S. military policy and institutions.		
2. To provide individual tactical training as a background for more advanced instruction.		
3. To familiarize the student with various individual non-tactical duties and responsibilities.		
U. S. Marine Corps Organization	4	
Marine Corps History	9	
Customs and Courtesies	8	
Equipment, Clothing and Uniforms	8	
Interior Guard Duty	11	
Chemical Defense	3	
Scouting and Tactical Training of the Individual	9	7
Combat Formations and Signals	7	
Combat Orders	11	
Drills and Ceremonies	72	
Leadership	21	
Military Training	23	
Military Composition	13	
III. BASIC TACTICS AND TECHNIQUES	258	42
The purpose of this subcourse is:		
1. To familiarize the student with the basic combat principles of all infantry units from the fire team to the battalion with emphasis on the rifle platoon.		
2. To show the teamwork required of all units within the infantry battalion.		
General Tactics	29	31
Fire Team Tactics	4	
Rifle Squad Tactics	33	
Rifle Platoon Tactics	57	2
Rifle Company Tactics	45	5
Machine Gun Tactics	37	
Mortar Tactics	32	4
Infantry Battalion Tactics	21	

SUBCOURSE AND SUBJECT	HOURS DAY	HOURS NIGHT
IV. SPECIAL TACTICS AND TECHNIQUES	280½	39
The purpose of this subcourse is:		
1. To familiarize the student with the combat principles of units within the infantry battalion in the conduct of various special operations.		
2. To familiarize the student with various weapons, units, and agencies which support infantry by fire.		
3. To thoroughly acquaint the student with amphibious operations as applicable to the infantry battalion.		
4. To familiarize the student with the use of maps and photographs.		
Patrolling	28½	9
Combat in Built-Up Areas	14	
Attack of a Fortified Position	11	
Combat in Snow and Extreme Cold	2	
Mountain Warfare	28	
Retrograde Movements	5	4
Passage and Relief of Lines	4	
Marches and Bivouacs	1	5
Regimental Weapons	12	
Tank Support and Tank-Infantry Coordination	16½	
Supporting Arms	36½	
a. Naval Gunfire Support	(8½)	
b. Air Support	(10)	
c. Field Artillery Support	(12)	
d. Coordination of Supporting Arms	(6)	
Amphibious Operations	52	21
Map Reading	48	
Aerial Photo Reading	22	
V. SUPPLEMENTARY SUBJECTS	256½	
The purpose of this subcourse is to familiarize the student with additional subjects which will broaden his professional knowledge and complement the subject matter covered in other subject courses.		
Terrain Appreciation	11	
Field Fortifications & Camouflage	5	
Administration	49	
Naval Justice	22	
Special Services	3	
Police Functions	8	
Combat Intelligence	11	
Staff Organization and Functioning	10	
Signal Communications	18	
Engineer Support	5	
Logistics	23	
Motor Transport	10	
Field Medical Support, Hygiene and Sanitation	6	
Air Transportability	4	
Naval Ordnance and Gunnery	62½	
Service Afloat (4 additional hours presented during amphibious CPX)	4	
Radiological Safety	5	
TOTAL INSTRUCTIONAL HOURS	1164	92
VI. PHYSICAL CONDITIONING	23	
VII. AMPHIBIOUS CPX	171	
HOURS SCHEDULED FOR COURSE	1450	

Corps career. This is more difficult to accomplish than is the more academic type of military training which is capable of finite analysis. The Leadership Section is particularly charged with the careful observation of each student's leadership characteristics as demonstrated by his daily practical performance. Other staff officers observe whenever an appropriate opportunity arises. These observations are translated into evaluation ratings which indicate the observer's judgment of the quality of various leadership characteristics of the particular student officer concerned. Using these evaluations as a basis, the staff of the Leadership Section, by individual advice, correction, orientation, guidance, interview and example assists each officer to develop his leadership qualifications to the maximum extent. No attempt is made to fit an individual into a predetermined leadership mold, for leaders differ greatly from each other—Washington, Lee, Grant, Pershing, Patton, and Geiger were all different. Rather the main endeavor is to insure satisfactory development of all characteristics with maximum development of the individual's natural, strong qualities.

THE REACTION OF SOME STUDENTS to the process of leadership evaluation and development is antagonistic. Students who receive a poor or unsatisfactory mark in an academic examination accept the results without question as mathematically representative of their academic ability. On the other hand, some students seem to believe they are in some way miraculously endowed with the gift of leadership along with their gold bars and resent any suggestion that there may be need for improvement in their case although recognizing that there is certainly need for improvement in most of their classmates. It is sometimes difficult to change this attitude into one of cooperation and an endeavor to improve. Recognition on a student's part that he personally needs to improve in leadership is a difficult decision for him to make. He knows that others need to improve but, if he receives a low rating, there is a tendency to feel that his qualities have been observed inaccurately or at the wrong time; that the observations represent the human judgment of an observer, who was wrong in his case, rather than the finite, arithmetical result of an examination. Once a student recognizes the need for personal improvement his progress is usually rapid.

The importance of leadership in the military profession and the principles and techniques utilized in the solution of leadership problems are covered in the classroom. Emphasis is placed on small unit leadership and the students take a very active part in the solution of practical leadership problems. Closely related to leadership instruction is instruction in military training principles and techniques which familiarize the students with sound, practical, and flexible small unit training methods.

Student officers are assigned duty as student battalion, company and platoon commanders and are responsible for their unit while so detailed, whether in class, at drill or in the field. For applicatory tactical exercises in the field, the students are also given specific assignments from rifleman on up to platoon and company commanders, depending upon the type and objective of the exercise. The major weight in leadership evaluation is given to field and drill performance.

The student has little opportunity to either command or train enlisted men during the course. It is doubtful that brief, transient command or training of enlisted personnel during the course would be of any appreciable value. The foundation for successful leadership is laid in The Basic School but the final test must await the graduate's performance when he has command of his own troops and full responsibility for their training, discipline, appearance and morale. This is the only type of command that can provide the ultimate test. Until the graduate is accepted as a leader by his own men he has not passed this final test. This would be equally true for graduates of a Marine Corps Academy, as it is now true for graduates of Annapolis and West Point.

Military Training

This comprises indoctrination in all infantry weapons, tactical instruction through the battalion level with emphasis on the rifle squad, platoon, and company, and training in the employment of supporting weapons in coordination with infantry. It includes indoctrination in command procedures and staff functioning as well as instruction in such basic technical and administrative subjects as are necessary for the performance of a general duty lieutenant.

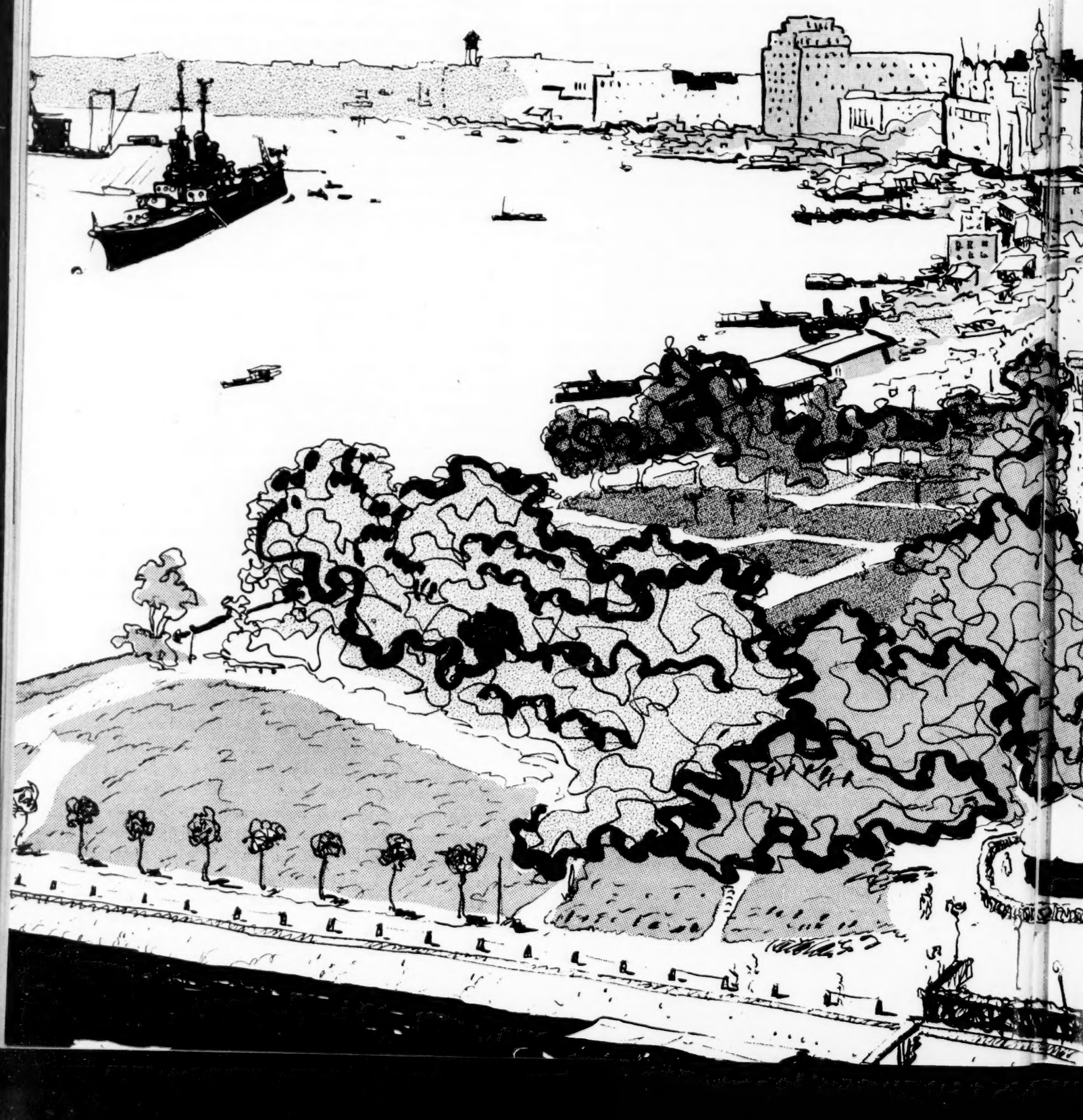
The several subcourses and subjects included in this division and the time allocated to each are shown by the chart on the opposite page. It is believed that examination of the chart will reveal that there is little that could be called NCO type of instruction, and that the essential facts of a junior Marine officer's career are reasonably well covered.

IT IS NOT EXPECTED that graduates of The Basic School will be the miracle men which Mr Reavis would have us believe a Marine Corps Academy would turn out. It is doubtful that they will know the "facts of the career" to Col Hudnall's satisfaction. It *is* expected that the graduates will have the inherent leadership ability and professional knowledge which will allow them to approach any assigned task appropriate to their rank with confidence in their ability to accomplish it in a matter meriting a well done from their subordinates, their contemporaries and their superiors. Perfection can only come with continued application, experience and responsibility.

USMC

Mr Aganev

By Maj Houston Stiff



To the sailors, it was souvenir hunting; to Mr Aganev, it was an outrage; to the Admiral's liaison officer, it was just another miscellaneous detail. But the dispatch had come from CNO. "Investigate. Take action. Expedite."

DURING THE WINTER OF 1945-46, I WAS ATTACHED to the staff of a rear admiral who commanded a task force that had moved into China waters shortly after the surrender of Japan. Among other things, my admiral was Senior Officer Present Afloat (or soap-pah, as the Navy says) at Shanghai. Our headquarters was there, and we lived aboard a series of cruiser flagships anchored in the Whangpoo off the Customs Jetty. As is usually the case when marines serve with the Navy, my duty assignments were an odd assortment—intelligence, legal, public relations, liaison, and some others which do not fall into any convenient category. It was in my capacity as liaison officer that I was assigned to investigate the Russian incident, or at least so I suppose; however, I fell heir to many strange assignments simply because the naval officers on the staff all had very definite and restrictive job-titles and were consequently unavailable for miscellaneous work. The case of Mr Aganev, being quite miscellaneous, may well have been turned over to me for this reason.

Mr Aganev was not mentioned by name in the priority dispatch which was received and read by the admiral at breakfast that morning. The few staff officers who had assembled in the admiral's mess for the morning meal were victims of the lethargy that is one characteristic issue of a Chinese dinner (we had all attended an official banquet the night before), and their hopes for a quiet day were dashed by the admiral's rather violent reaction to the message. Regarded as a relatively calm man, he was startled into excited volubility and issued at once a number of fairly incoherent orders to those present. Breakfast ended abruptly, leaving everybody in the middle of tomato juice. I was not present for the reading of the dispatch, since my own case of lethargy had set in much earlier, the evening before, in fact, and I had spent the night ashore; however, the chief of staff's orderly met me on the quarter-deck as I came aboard and briefed me on the situation.

The disconcerting dispatch had been originated by the Chief of Naval Operations in Washington, which fact at once gave it importance. Further, it referred, in terse cablese, to an "international incident," a phrase which with no further amplification is enough to bring chilled apprehension to the professional naval officer. An official Soviet automobile, it appeared, had been accosted on the streets of Shanghai by a group of American sailors, the Soviet flag had been torn from the car and thrown in the gutter, and the chauffeur had been assaulted in an unspecified manner. All this had occurred some

The Admiral, ordinarily a relatively calm man, hit the overhead and issued a number of fairly incoherent orders. Breakfast ended abruptly, leaving everyone in the middle of tomato juice.

two months before, well within the limits of our admiral's responsibility.

"Investigate," the dispatch said; "Take appropriate action and report. Expedite." The rather serious implication was that the admiral had let something get by him, and that if he had not been previously aware of the incident then he damned well should have been. A hurried canvass of the staff and of the Shore Patrol headquarters in Shanghai produced negative results: no one had ever heard of the incident, but this proved little since during the elapsed two months there had been a great turn-over of personnel, due to the pressure of demobilization. A light cloud of guilt hung over our staff because it was unfortunately possible that a matter of this sort could have got lost somewhere in the shuffle of business—it had happened before. It would be embarrassing to ask the Russians for information, yet that seemed to be the only remaining alternative.

By the time I got involved, there were still only the haziest of notions as to what action might be appropriate. The chief of staff, an affable, youngish captain, had been told to handle the matter personally, and had logically decided to go ashore to commence investigating. He gave me time to shave, and then we were off, picking up on the way a reluctant commander who was the assistant naval attache for Shanghai. There followed a lengthy and aimless ride through the narrow Shanghai streets; the three of us, crowded morosely together in the back of the Captain's limousine, held a disjointed conference of war while the Chinese driver steered a devious course of which the only fathomable dimension was recklessness. The pooled English vocabulary of the Chinese hired as drivers for our staff amounted to perhaps 25 words, and most of these were stock phrases like "Cathay Hotel," "Sun Ya Restaurant," etc.; parleys with these people were therefore on a hit-or-miss basis, particularly with our driver of the moment, who was not only deficient as a linguist but a poor driver and physically repulsive as well. Some obscure skin disease (our surgeon had ascertained that it was not contagious) had given him a dreadfully corroded appearance. He was called Dorian Gray, because of his striking resemblance to the ravaged hero in the picture of the same name. My impressions of that morning remain vivid: the cold air with its abundant odors, the near-physical presence of our three hangovers, and our erratic, dan-

gerous progress through the streets, made to the accompaniment of continual blasts on the horn and the angry cries of various pedestrians whom we barely missed or grazed.

It was nearing noon when we finally arrived at a building on the Bund—about five minutes away from our original starting point—in which the Soviet Consul-General had his offices. There had been some trouble finding the place, each of us having different opinions as to its location. I was supposed to know, but didn't; I had seen the building many times before from the windows of the Broadway Mansions Hotel, just across the street, somehow without grasping the significance of the large hammer-and-sickle banner which flew above it. Additionally, Dorian Gray, confused and excited by the divergent directions from the back seat, had increased his speed and the pressure on our nerves without noticeably improving his direction; it was as though the automobile had taken the bit in its teeth—Dorian clinging desperately to the wheel, and we in the back thrown first against one side and then the other. I believe we passed quite near our destination several times before we at last hit it on the nose.

WE TRIED SEVERAL FORMIDABLE DOORS before finding one which was unlocked, and entered—into an abrupt change of atmosphere. There were several poorly-lighted rooms and a long gloomy corridor, well filled with groups of silent, staring people of obvious Slavic descent. No one greeted us, and after the first moments of our entrance, we were ignored. The Chief of Staff, in hushed tones, appointed me as spokesman, and I looked around for some person of authority. Most of those present were busy filling out printed forms, and there was very little talking; I had the impression that some sort of examination was underway, and felt that we were in the wrong place. As I was about to pass this notion on to the Captain, we were approached by a small shabby man who inquired, in broken English, what we wished. Much unprofitable discussion followed his question: there was mutual difficulty with language; twice it seemed that we had made ourselves understood and the little man disappeared down the dark hallway, to consult (we thought) his superiors, only to return and resume the conversation practically with his initial query. At length, a taller man, less shabby and with a better command of English, came out, and this man understood at once the purpose of our visit. He recalled the incident, he said, but the Consul-General was not interested in the matter. He would, however, give us the address of a Mr Aganev, a Soviet Trade Representative whose automobile had been the one defiled by the American sailors; any further discussion would have to be with this gentleman.

Back in the car, I was not surprised to learn that the Chief of Staff had been much offended by our reception at the Consulate. So had the Attache, it appeared, and the two of them gave voice to their resentment.

"I'll be damned," said the Captain, "if I'll go crawling up to some two-bit traveling salesman to apologize. You find the bird this afternoon, Major, and get this thing straightened out."

The Attache thought this a good idea, and hastily left us, saying over his shoulder something like "call me if I can be of any further assistance."

After lunch aboard the flagship (the admiral was fortunately absent), I set forth alone, physically revived, and feeling much more secure in a jeep with a seaman second-class as driver. The address of Mr Aganev promised to be an easy one to find, being on Bubbling Well Road, which, as an extension of Nanking Road, runs from the Bund through the principal metropolitan area and on out into the suburbs. Mr Aganev's residence was well out, and, quite in character with the whole affair, was a large three-story stone house set in the middle of spacious but untended grounds surrounded by a high fence of wrought-iron pickets and cyclone wire. Mr Aganev, I thought, must be something more than a traveling salesman.

I half expected to see a Cossack guard at the gate, which had a portable barricade thrown across it, but there was only an ancient Chinese who came out of the little gate house and moved the barricade without a word. A pervading silence seemed ominous; the driver sensed my nervousness and shared it. Leaving him and the jeep in the covered driveway, I knocked on the door and then pushed a button which I had not seen at first;

He was not only deficient as a linguist, but was a poor driver and physically repulsive as well.

The three of us sat down at a small table in front of the fire. Mr Aganev was a small dark man with regular features and an aggressive look about the eyes which did nothing to put one at ease.

I could hear the bell ringing faintly within. Long minutes passed, then suddenly the door was open and I was confronted by a Chinese servant, who motioned me in when I asked for Mr Aganev. The door closed silently behind, and the servant, saying, "Wait here, please," left me standing, for the second time that day, in a long and gloomy corrider. This was different, however, from the Soviet Consulate—better furnished, and fewer people. In fact, there was nobody at all around, and I felt very much alone. I began to wish that I had brought the driver in with me: people, I recalled, had been known to disappear in Shanghai. I edged around and got my back against a solid-looking wall. Very soon, the servant reappeared, followed by an undistinguished man in a neat gray business suit. This man greeted me pleasantly in excellent English, shook my hand vigorously, and led me into a light, well-furnished but chilly room which opened off one side of the corridor. We each took one of my cigarettes, and I launched a nervous explanation of my mission. My audience, who looked a little, I thought, like a beardless Trotzky, listened intently, and punctuated my recital with emphatic nods to indicate that he was following me. When he was sure I had finished, he sighed deeply.

"I am not Mr Aganev," he said. "I am Mr Aganev's secretary. Mr Aganev is out, and I do not know when to expect him." With this, he rose: "Please wait here. Excuse me one moment."

As he left the room, the Chinese servant entered bearing tea. The room was cold, and I shivered. If Aganev was out, probably I should wait; yet the idea of leaving at once had a strong appeal. On the other hand, I could expect a frosty reception if I returned to the flagship empty-handed. Throwing caution to the winds, I drank two cups of the hot, bitter tea, and was looking surreptitiously about the room for signs of a dictaphone when the Secretary reappeared.

"Mr Aganev has just returned. He will see you now. Will you please come?"

We went down the long hallway and through a pair of sliding doors into a large room, richly furnished and warmed by a coal fire in a grate to one side, and there

I met Mr Aganev. He was a small dark man, well-tailored, with a neat black mustache. His features were regular, with an aggressive look about the eyes which did nothing to put one at ease. The Secretary explained that Mr Aganev did not speak English, but that he was willing to discuss the matter with me.

THE THREE OF US sat down at a small table in front of the fire. The Secretary passed around Russian cigarettes, which were long hollow tubes, mostly cardboard, with perhaps an inch of tobacco in one end.

Mr Aganev got out his lighter—a new Ronson, I noticed. I also noticed that he was looking queerly at me as I held my cigarette up to the flame. I had the wrong end in my mouth. Aganev courteously removed my cigarette and replaced it in the proper position. Hastily, I opened the discussion.

I explained that I was representing my Admiral, that we had received a meager report of the incident involving Mr Aganev, and that because it had happened so long ago, we were unable to apprehend the guilty sailors or even to obtain pertinent detailed information. We were very sorry, I said, that the thing had occurred, but, regrettably, we were unable to rectify it. Perhaps Mr Aganev would be so kind as to assist us; possibly he could give us information which would be helpful to our investigation: would he give me his side of the story? All this was relayed, in Russian, by the Secretary. Aganev's reply began slowly. His first gestures were restrained, his speech was rather low-pitched, and deliberate. He seemed to be going into considerable detail. Slowly, the tempo of his recitation increased, gestures became more frequent and sweeping, and fire appeared in his eyes. It became obvious that the incident had effected him sharply and that the memory was still bitter—I know not one word of Russian but I understood him clearly when he told and demonstrated how the Yankee sailors had torn the Soviet flag from the bonnet of his car and trampled it (and the Chinese chauffeur) into the gutter. I fixed him with an intent stare throughout, hoping that he and the Secretary would suspect that I knew Russian after all.

When he had finished, Mr Aganev shifted about in his chair, agitated and breathing hard. The Secretary translated his remarks. I asked a few questions about details, and received definite answers. I was relieved to note that Aganev seemed to be regaining his calm.

What he had told me did not add a great deal to the dispatch version; however, it was interesting to learn that the automobile had been parked, at the time of the incident, and that Aganev had not been present . . . interesting too, though not surprising, that Mr Aganev attached much significance to the fact that the sailors had chosen his car as the object of their outrages rather than other official foreign cars parked in the vicinity. Clearly, to him the affair reflected the general American attitude toward his country. His report had gone directly to the Soviet Embassy at Nanking, thence (presumably) via Moscow to Washington and back to Shanghai.

I was at a loss for something further to say, although the two Russians seemed to expect more. I was by no means authorized to apologize on the Admiral's behalf, yet, when I broke the heavy silence, I found myself offering a stilted sort of apology. The two sailors who had done this very bad thing were probably drunk, I told Mr Aganev; and it was unfortunately true that there had been a lot of trouble with sailors on liberty in Shanghai. They were mostly very young, I pointed out, and had been a long time at sea—Shanghai was, for many of them, the first liberty port in many months. I offered, as an excuse, that the two who had taken his flag were most probably after a souvenir, and had no grudge whatever against the Soviet Union. I declared that the American Navy was proud of its Russian allies, and had nothing but admiration for the magnificent Soviet war effort. While it grieved us that we could probably do nothing about this particular incident, we would certainly take appropriate steps to prevent a recurrence—even to the extent (here I got a little carried away) of restricting all sailors to their ships, if necessary. All this was lengthily translated for Mr Aganev, who appeared to relax somewhat. Some part of my speech, probably the admission that control of our men was not all it should be, had appeased him. He replied, and his manner was almost genial, that he did not wish anyone punished for what had happened to his car. "Mr Aganev says he is forgetting the matter," the Secretary told me, and I was grateful.

I accepted another Russian cigarette, being careful about the ends. Winding up the conversation, I realized that I hadn't got the correct spelling of Aganev's name or his official title, so requested this information of the Secretary.

"Just a minute," said Mr Aganev in English (and to my startled ears there was no trace of an accent), "I'll give you my card." And he did.

Back on the ship, I made my report, and later drafted an official version which apparently satisfied the Chief of Naval Operations, for we heard no more about it. But for me, the payoff came some months later, after I had returned to the United States. There was an issue of LIFE which carried the photographs made by one of its correspondents during a trip over the Trans-Siberian Railroad, and my eye caught a familiar face among those pictured. It was Aganev, of course—turned out he had been the correspondent's traveling companion. A rather plaintive caption said that it had taken the correspondent three days to discover that Mr Aganev's English was much better than his (the correspondent's) Russian.

USMC

Communications — How?

By LtCol Roger C. Power, Jr.

IT IS DOG DAY, HOW HOUR-MINUS TWO AND PVT John Jones trips as he carries his radio out of the black-out baffles around the entrance to the passageway of the blacked-out ship. Fumbling in the dark, he and his corporal attempt to erect a TBX on the deck of the ship, cursing as it rolls to and fro with an attendant scattering of parts. For the next two hours they attempt to operate within a black-out shelter formed of shelterhalves, until finally morning twilight allows them to discard the shelter and breathe once more.

How many "communicators" in the Marine Corps experienced just such a thing during the last war? Was our communication equipment adequate to do the job at hand—the job of providing a "voice" for our unit commanders? Did we have the latest equipment and the equipment that met all the requirements for an amphibious operation? The answer obviously is "No." Granted that communications worked and the message did "get through," but it was oftentimes due to the good leg-work of some strong-backed messenger on foot. Such slow methods of communicating command decisions, while not desirable, had to be tolerated in the last war due principally to equipment deficiencies. With the advent of A-bombs and super-sonic missiles and aircraft, such delays can not be tolerated.

Take the example of the radiomen who had to stumble around the blacked-out decks of our ships on D-day to erect equipment, or the wiremen who had to string field wire along the overheads and place phones in troop compartments for interior communications. Such methods were jury rigs and they worked, but they were not the efficient systems that will be needed in the event of another conflict. Of course, the answer to this problem is simple and obvious, and it is hoped that it will be solved within the near future. The landing force and its subordinate units, no matter on what types of ships it is embarked, must have available to it certain radio equipments which are installed as an integral part of our amphibious ships and craft, and which are specifically "ear-marked" for those units. Also, the interior communication facilities of all amphibious ships must be expanded to the point where adequate teletype, air-tube, sound-powered or automatic telephone circuits are available to the troop commander. The radio equipments ear-marked for the use of the landing force should be of the type and number necessary for commanders to handle all tactical traffic. If such a dream situation can be realized, it would mean that our communication platoons and signal units, instead of having to ruin the water-proofing by unpacking radios and wire equipment that will be used ashore, will be able to walk aboard our amphibious ships and craft and, in a matter of about an hour, have a message center running and radios ready and waiting to break silence on Dog-day upon signal from the Attack Force Commander. Organic equipment, that is to be handpacked ashore, could then be available at any time for loading into landing vehicles or craft.

THAT, then, would adequately satisfy the communication requirements of the various landing force headquarters while they are embarked on amphibious ships. However, the question still arises as to the adequacy of our equipment for our particular operations when the landing force is ashore. It is well known that all equipment used in amphibious operations must be rugged, light in weight, small in volume and water-proof (preferably immersion rather than splash-proof). These characteristics must be built into the equipment as it is manufactured. Was our equipment of that type in the last war? Here again the answer is emphatically "No." It is doubtful if there was any amphibious operation in which the landing force didn't suffer some degree of communication equipment casualties just from lack of water-proofing alone. Rubber-coated or water-repellent canvas bags could be a partial answer, but they do not usually permit the equipment to be operated while so contained.

Aside from the physical characteristics of the gear, however, we must consider other problems in our communication system—the problem of speed of transmission and flexibility of the system. Naturally a radio message, once it gets started and the radio wave leaves the antenna, travels with the speed of light, so it could be argued that we have the problem of speed of transmission licked. That argument does not take into effect the time delays that enter into a message from the time

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LtCol Roger C. Power, Jr, is at present attached to the office of the Chief of Naval Operations. A second article by him on the improvement of signal equipment will soon appear in the GAZETTE.

With the advent of A-bombs and super-sonic missiles and aircraft, such delays in providing a "voice" for our unit commanders as occurred in World War II would prove fatal. The integration of our signal equipment would solve the problem.

it is written by the originator, delivered to message center, encoded, transmitted, decoded and delivered to the addressee. These delays oftentimes add up to a period of hours and again cannot be tolerated in future warfare.

The second problem — that of flexibility of the system—has not been licked simply because of the fact that we have no "communication system." Oh, yes, we do have communication plans, frequency plans, SOPs, SOIs and pieces of equipment to implement all the foregoing. But, and the *but* is important, these pieces of equipment are, as the name implies, simply pieces and not a system. By this statement, it is meant that the various pieces are designed and built not to be integrated into an overall "communication system" but to be used in single point to point circuits or radio and wire nets. Webster defines a system as "an assemblage of objects united by some form of regular interaction or interdependence" and what form of "regular . . . interdependence" do we have between a TBX radio and BD-72 switchboard?

What, then, do we need in a communication system that will make it have the physical and electrical characteristics desired, and will give us speed of transmission and flexibility?

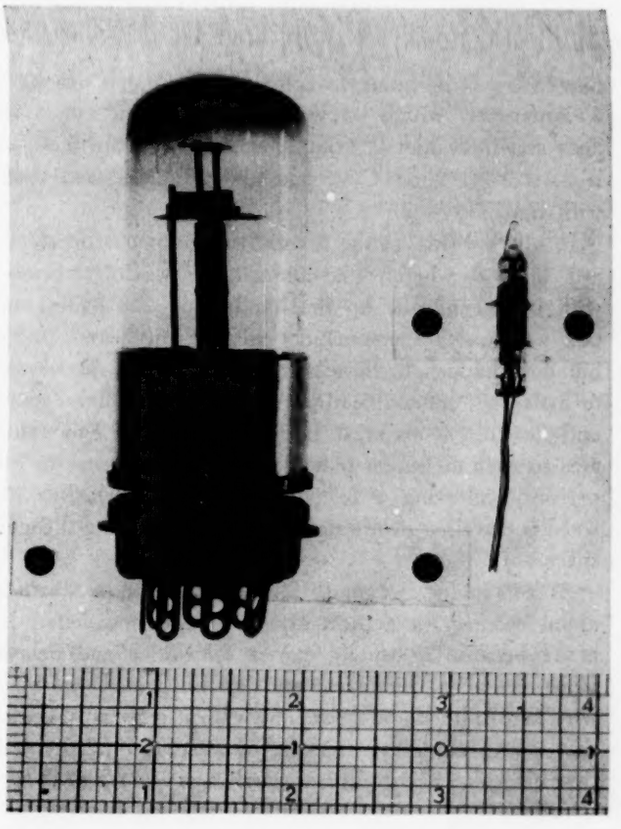
Let us look first at the physical and, of course, electrical characteristics. Few of our radios and switchboards are capable of being transported by one man or even two men. Recent newspaper articles have indicated that many commercial firms are rapidly realizing our desires for smaller and smaller components to be made an integral part of the electronic equipments we use. An example of this would be the Bell Telephone Laboratories "transistor" which can be a replacement for many of our radio tubes and has, in addition to its small size and light weight, the feature of being fairly rugged because it is made of metal and not of glass as are our present-day conventional tubes.

BY PROPER UTILIZATION of miniaturization and subminiaturization techniques and the newly developed technique of enclosing entire stages of radio sets in plug-in plastic units, it will be entirely possible to devise equipments that are approximately one-half the size of our present-day sets and have built-in immersion-proof or splash-proof features. These characteristics of our components of our communication system must, of necessity, be left to the design engineers both within the Armed Forces and in industry, but we in the Marine Corps must make our need for such characteristics well known to those engineers.

The characteristics of speed of transmission and flexibility are interrelated and should be considered along with other features such as security. The fastest transmission speed through space of which we know is that of light and electro-magnetic waves. We can rule out the use of light mainly due to its lack of security unless we talk in terms of infra-red sets. However, contrary to the popular belief, infra-red rays do not have the ability to penetrate clouds, fog or other unfavorable weather to any greater extent than ordinary light. Thus we cannot utilize it to form a communication system that must work regardless of weather conditions. This brings us to the use of electro-magnetic waves and electronic devices for our high speed, flexible, secure system.

Presuming, and the presumption is based on fact, that the engineers, be they in the Armed Forces or industry, can give to us equipment that is small and light, equip-

Comparison between normal and subminiature three-element tubes demonstrates space and weight saved.



ment that is water-proof, and equipment that is so rugged that failures would reduce to one in ten thousand, we still must contend with operators. These operators might be hastily trained and oftentimes unfamiliar with the equipment, so we must ask for equipment that is simple to operate. It must be of the "push-button" variety—push one button to turn it on and possibly turn one knob to increase the volume. This means that, insofar as radio sets are concerned, they must be crystal controlled or preset (in rear area maintenance shops) and impossible of drifting off frequency. Such a feature would have the added advantage of infallibility of netting equipment since tuning would not depend upon the proper interpretation and interpolation of frequency curves by an inexperienced operator.

Now let us look at the problem of increasing the speed of transmission. It was previously stated that delays are encountered in internal handling of a message and encoding and decoding, all of which have nothing to do with the electronic transmitting and receiving device. In any adequate communication system such delays should be overcome by incorporating the necessary handling, coding, etc. into the electronic device doing the transmitting either as an integral part or as another small component.

MESSAGE TRAFFIC is not the only place where a speed-up is required, however. Suppose Col Hollowhead of the Blank Marines desires to communicate and confer with Col Standpat, the G-3 of division, and it so happens that Col Standpat is inspecting the front-line situation. How is he going to communicate, much less have a conference, which implies a conversation, unless he goes and finds him or sends a message to Col Standpat, who, like all good G-3s, has his radio and radioman with him.

In other words, at the present time, there is no standard method whereby a commander, having a radio with him, can pick up the handset of that radio and talk with another commander who is not near a radio but does happen to have a telephone handy. If we are to have a "communication system" that offers speed and flexibility, we must integrate our wire and radio nets to such an extent that it makes no difference to the person conducting a telephone call as to whether his word is traveling over a metallic loop or is going through space.

At this point, we must interject a note of warning about security, a subject known by all and hated by many because it usually causes difficulties and delays. However, when we achieve such an integrated system of wire and radio, we must achieve with it a security device that will preclude the necessity of warning an individual that his voice is traveling through space and not over a wire line.

With all of the foregoing thoughts well in mind, let us attempt to build a "communication system" for a Marine Division. As far as the physical characteristics are concerned we will assume that for units of the size of companies and battalions each equipment must be capable of being carried by one or two or, in rare instances, three men. For units of regimental size, during the initial phase of an operation, battalion type equipment will be used, to be replaced, when vehicles can get ashore, with jeep-mounted or jeep-transportable equipment. For division headquarters, some portable types should be available, but the majority of the equipment should be carried in the necessary number of truck-mounted shelters like the House, HO-17. Having established these physical requirements, let us now turn them over to the engineers and rest assured that they are well within the realm of possibility.

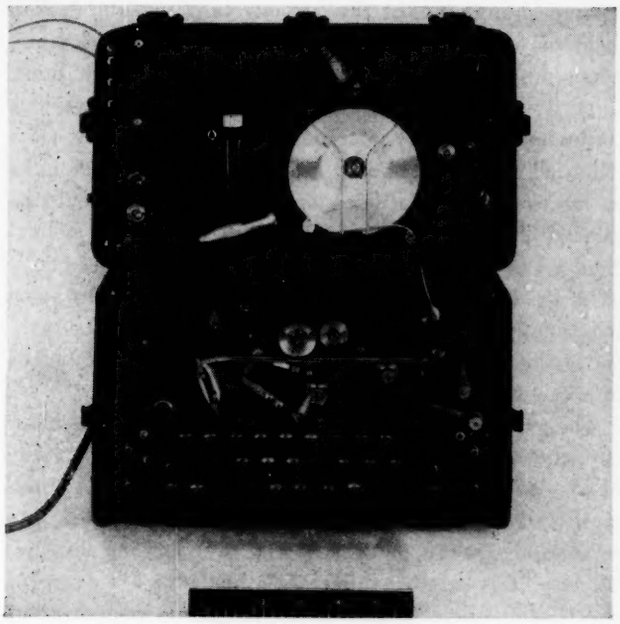
WE WILL LIMIT our system to a consideration of the main infantry command channels with the understanding that it can be applied to attached and supporting arms and services.

The first requirement for integrating our wire and radio circuits is, very simply, a switchboard. Our present switchboards are quite incapable of taking a conversation from a distant telephone and having it modulate the output of a radio. We should have a switchboard that will be able to interconnect all telephones and all types of radios freely and with no loss in intelligibility. The distance at which the telephone can be located from the switchboard should be limited only by the talking range of the wire with which the telephone is connected to the switchboard. Having achieved such a switchboard. integration of wire circuits with radio networks is a fact. and we are already well on our way to a system.

Within a battalion headquarters we should have two (one for echelonment) of the above switchboards which would have a minimum of three connections for radios and six for wire lines. Thus the battalion tactical radio set could be tapped onto the switchboard as well as two radio circuits to higher headquarters. Company commanders would be able to converse with adjacent company commanders in his own battalion even though intervening land masses wouldn't allow direct contact by very high frequency radio.

In cases of necessity adjacent company commanders of different battalions would be able to converse through their battalion radio sets working into the tactical wire system. The possibilities are many-fold for the use of such equipment.

AT THE PRESENT TIME our electronic communication between battalion and higher headquarters are limited to wire, voice radio, and CW radio. Two other types of communication, at present used only by divisions and



Teletypewriter developed by U. S. Army Signal Corps. Weight and size indicates that it could be used by battalions and higher units in the communication system described in this article.

higher headquarters, should be made available down through the battalion headquarters. These are teletype and facsimile. With the present state of the electronics art, there is no reason apparent why, with proper development, these two items of equipment which are at present so bulky, cannot, through miniaturization, be reduced to a size and weight suitable for one or two men to carry. Making teletype available to battalions would give them a working substitute for the old telegraph set that never has and apparently never will operate properly. Trained CW operators would not be necessary for operation and an accurate page copy of the transmitted message would be available.

EVEN of greater value than teletype, however, would be the introduction of a portable facsimile equipment to the battalion level. Facsimile equipment takes any type of printed or written material and transmits it either over wire lines or via radio circuits. Thus written messages could be transmitted as they come off the originators message pad in the originator's own handwriting. Such handwriting would of itself serve as authentication of the message. Facsimile would preclude the necessity for using messengers to transmit maps, sketches and overlays and would cut the time of such transmission. In addition, there are available today, facsimile machines whose receivers cut mimeograph or ditto type stencils of the received message. Such stencils would be of inestimable value to headquarters where multiple copies of received messages are required. It would be very simple to remove the stencil copy of the received transmission from the facsimile equipment and run off the desired number of copies on a mimeograph or ditto machine located right in the message center.

So far, we have mentioned a switchboard to integrate wire and radio, teletype and facsimile, but what of better radio equipments. Our present radios at levels lower than division headquarters can only transmit one voice or CW channel on one radio frequency at one time and yet, toward the end of the last war, there was equipment in use between Corps and Division levels that could transmit three voice and four teletype signals utilizing a single radio frequency channel. Admittedly the equipment was very bulky and entirely too heavy to be used by a battalion headquarters. Here again, miniaturization and other new techniques should be called upon to give us an equipment that would be capable of transmitting two voice, one teletype and one facsimile signal from battalion to regiment, such equipment to be within our previously stated man-pack limitations.

Our communication system is now beginning to take shape, but we must not forget the previous warning about security. If we have equipment that puts voice, teletype, and facsimile signals on the air simultaneously, we must give a possible enemy credit for being able to intercept and gain intelligence from those signals. That leads us to the final component needed in our system at battalion level—some sort of a little "black box" that will give us universal security no matter what type of signal is modulating the radio transmitter. This "black box" would be fitted into our system wherever there is a radio transmitter and receiver and, in some cases could be integral to the transmitter and receiver. It should not be necessary to have separate devices for facsimile, tele-

type and voice. One device should code or scramble all types of signals.

The accompanying sketch shows a complete system for an infantry division. It is readily seen how the wire, radio, teletype, and facsimile components are all integrated into one system that meet the requirements previously set forth.

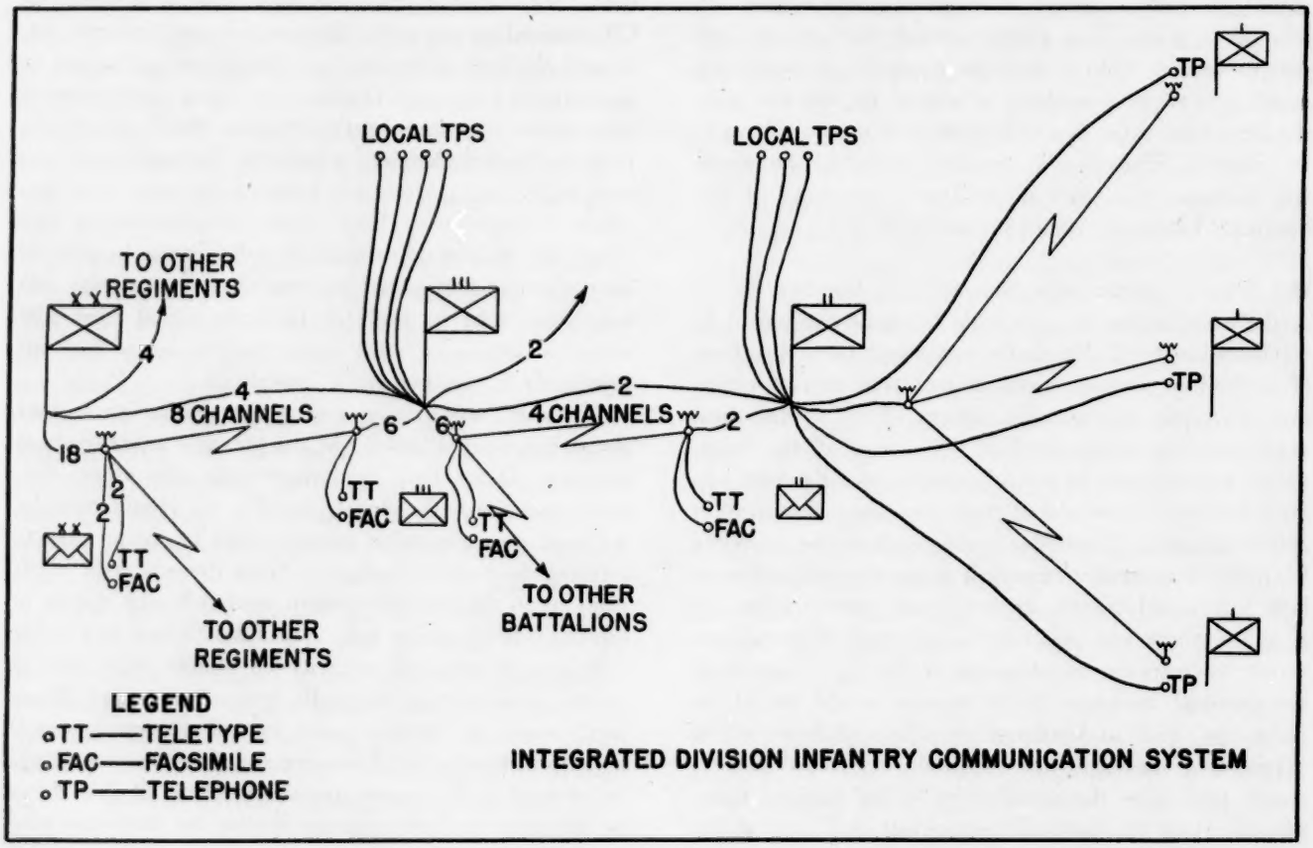
AT THE REGIMENTAL LEVEL, the equipments utilized to give the regimental portion of the system could be identical with those employed at battalion headquarters with the exception that the radio equipment should be capable of omni-directional transmission of 12 to 15 voice, teletype, or facsimile signals on one radio frequency channel. In that way, one radio could be utilized to receive the four signals from each battalion and possibly handle voice signals from a few supporting or attached units. Also additional components of each type should be available for use, such components to be jeep-mounted so that they could replace portable equipment.

Carrying through to division headquarters we again use the same equipment except that we have more of each type, and they can be carried in truck-mounted detachable shelters. In landing operations where more than one division is employed, extensive installations of duplicate equipment can be made for the Landing Force (Corps) headquarters, and the picture would be complete.

In designing all of the various portions and equipment of our system, a method of interchangeable components should be established to the practicable limit. That is, common types of components of the various equipment should be interchangeable. For ease of servicing, all equipment should be made of plug-in type units as far as possible so that stocks of these units could be carried by the Signal Quartermaster ready to be exchanged for unserviceable ones. The multi-channel radios used by all headquarters should operate in the same frequency range so that there would be no difficulty in establishing communications when a new unit is attached to any headquarters.

The system described above is one which should allow any commander to speak, through his "voice," to any of his subordinate or attached units. It is "amphibious" in that it would be capable of being man-handled into small landing craft or vehicles and over landing beaches. Because it is an "amphibious" system, and because of the Marine Corps responsibility for the development of amphibious equipment and techniques, the Marine Corps must ensure that such a system is developed.

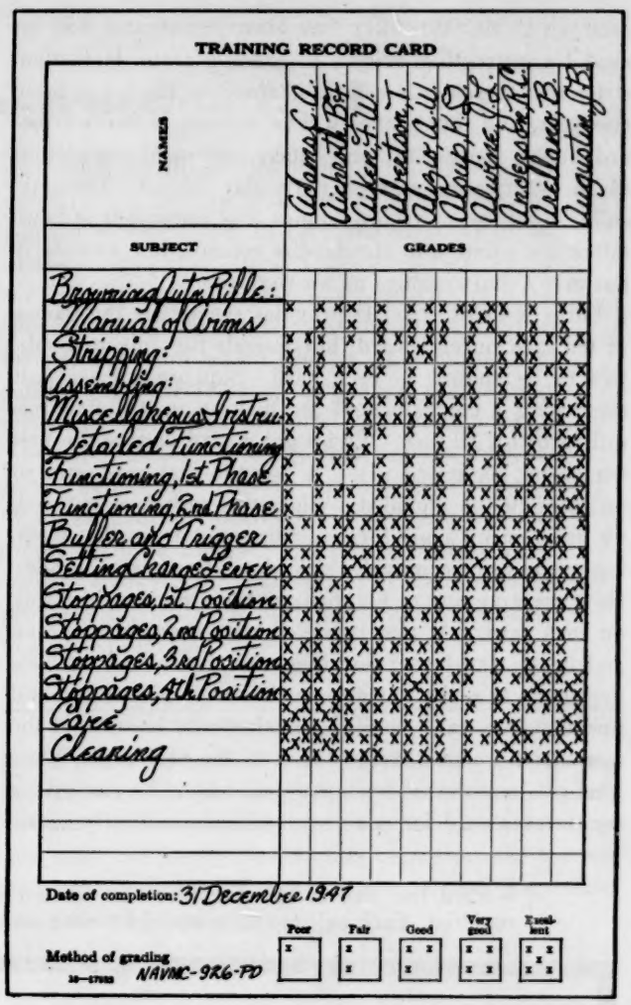
During the last war, we had practically no communication equipment at the end of the war that was not in production or about to go into production at the beginning of the war. If we are to have an adequate "communication system" in the event of another war, we must order it now. USMC



INTEGRATED DIVISION INFANTRY COMMUNICATION SYSTEM

Proposed: A New Training Record Card

By LtCol Edward H. Drake



Filing is difficult with present training record card that provides for 10 names and one subject.

On 15 April, 1947, the Commandant of the Marine Corps promulgated Letter of Instruction 1445 addressed to "All Commanding Officers" covering the subject: "Basic Training of Enlisted Men." This Letter of Instruction superceded Marine Corps Order Number 146, which had been in effect for several years. No previous training directive had ever before been broad enough in scope to take cognizance of the fact that *all* Marine Corps units are not Fleet Marine Force units, and hence, cannot be trained as such. The letter was well worded and clarified many hazy points on how to conduct a comprehensive training program. Since that time, Letter of Instruction 1445 has been superceded by Letter of Instruction 1544—the latter still further clarifying the Commandant's desires on basic training for enlisted men.

Both of these letters of instruction attempted to standardize the system of recording the training progress of each enlisted man so that training results might be more accurately transferred to page 24 of the individual's service record book.

All commanding officers know that in the past the systems employed by organizations in recording the training progress of enlisted men varied radically. Many organizations kept incomplete and inaccurate records, and hence when commanding officers were required to enter marks in service record books, instead of merely having to transpose from training record cards they were at a loss and had to guess at the marks each individual should receive. Regulations required them to enter an "S" or a "U" under each training subject required for that individual. It was an easy matter to mark an "S" down under each subject, and unless the individual being marked was a perfect "8-ball," he ended up with a beautiful string of satisfactory (S) marks. Obviously that form of indiscriminate marking was utterly useless as a guide for planning what form of training that individual should receive when he arrived at a new post or station.

Letter on Instruction 1544 states that a training record

The present Training Record Card (NAVMC-926 A&I) sounds fine because it at least offers one solution to standardize records, but the author says it has many shortcomings. He offers a card which would become part of a man's staff returns

card (NAVMC-926 A&I) has been issued and will be used by instructing officers in grading men. It further states that these cards will be retained on file for at least one year, and that grades will be entered in service record books (page 24), only upon successful completion of an examination in each particular subject. Theoretically, this form of record sounds fine because it at least offers one solution to standardize records, but actually it has many shortcomings as we shall see.

Form NAVMC-926-PD provides spaces for the names of ten men on each card, but intends for only one subject to be shown on each card. Suppose we are just organizing a company and are making up training record cards for all men. We fill out a card putting the first ten names beginning with "A" on the first card, and so on through the alphabet. When this task is completed, we must set up some form of filing system so that training cards can be quickly located when entering grades. How are we going to file them with ten names appearing on each card? At first it is easy until men start joining and being transferred and then complications start. We then have to make out new cards for those joining, and find that they can't be filed alphabetically because of the fact that ten names are on each of the old cards. When a man is transferred his name still has to be carried on the training card for one year, which immediately causes a mixture of live and dead material on each card affected. This will cause a great deal of time to be wasted when searching for a specific name.

Since only one subject is supposed to be entered on a card, this means that each master sergeant's name will have to appear on 32 cards in order to take care of all the subjects he is required to know.

The training card presently in use provides no space to show the amount of time spent on each subject, neither is there space to show what months certain training was conducted.

The system of grading shown on the present training card appears to be outmoded. It requires small Xs to be made in the squares provided—one "X" representing a "Poor" mark, two Xs—"Fair," three—"Good," four—"Very Good," and five—"Excellent." This system of rating does not parallel the marking required on page 24 of the service record book—the latter requiring only an "S" (Satisfactory) or "U" (Unsatisfactory). The system of marking "Xs" on the card, and the "S" and "U" system of marking both appears obsolete. An "S" could mean anything from a passing grade of 70 per cent to a perfect grade of 100 per cent. Why not grade numerically? If we decide to grade numerically, why break down an accurate system by using an "S" or "U" in the service record book?

A card the size of the Classification Record would provide ample space to enter all the data required. Each enlisted man would have his own card showing the subjects he was required to know.

TRAINING REPORT CARD OF: Doe, John Q., MSgt FOR: 1948

SUBJECTS (PRIVATES AND PRIVATES FIRST CLASS)	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL HOURS	FINAL MARK
Infantry Drill	1/100		1/100			1/100					1/100		4	85
Military Courtesy and Drill		1/100			1/100								2	90
Military Sanitation Hygiene & First Aid			2/75			1/100							3	85
The Pack, Parts, Assembly and Adjustment								2/100					2	95
Clothing and Equipment; Care, Marking & Display									1/100				1	98
Interior Guard Duty	1/100				1/100						1/100		3	90
U.S.Rifle, Cal. .30, M1							1/100					1/100	2	99
Carbine, Cal. .30, M1		1/100				1/100			1/100				2	85
Automatic Rifle, Cal. .30, M1918A2				2/100							1/100		3	93
Hand and Rifle Grenades			1/100					2/100					3	83
Defense Against Chemical Attack					1/100					1/100			2	87
Elementary Map and Aerial Photo Reading	1/100					2/100						2/100	5	81
Shelter Tents			1/100										1	95
Scouting and Patrolling							2/100				3/100		5	87
Individual Protection	2/100									1/100			3	91
Combat Signals		1/100		1/100									2	94
Tactics of the Fire Team and Rifle Squad			1/100		2/100		1/100					1/100	5	92

(OVER)

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL HOURS	FINAL MARK
SUBJECTS (CORPORALS AND SERGEANTS)														
Technique of Instruction	1/100				2/100				1/100				4	90
Tactics of the Rifle Platoon		2/100				2/100							4	97
Interior Guard Duty			1/100				1/100						2	93
Technique of Leadership				2/100				1/100				1/100	3	85
Scouting and Patrolling-Part 2					3/100				1/100				4	94
SUBJECTS (STAFF, TECHNICAL, AND MASTER SERGEANTS)														
Tactics of the Rifle Company									3/100	3/100			6	86
Parades and Reviews	2/100					1/100			1/100				4	78
Military Functions in Domestic Disturbances		1½/100					1½/100					2/100	5	78
ADDITIONAL TRAINING (ALL ENLISTED MEN)														
Practice Marches				1/100	2/100	3/100	4/100	4/100					15	OK
Swimming									5/OK				5	Qual 2nd Class
Marksmanship Rifle or Carbine												EC/Ex	240	Sharp Shooter
*Machine Gun	1/100	1/100	1/100		2/100								5	92
*60mm Mortar	1/100	1/100	1/100		2/100								5	86
*81mm Mortar			1/100		3/100								4	88
*Rocket Launcher	1/100		1/100		3/100								5	90
ADDITIONAL TRAINING (FIELD MUSICS & INDIVIDUALS ARMED WITH PISTOL)														
Drum and Trumpet														
Automatic Pistol, cal. .45														

METHOD OF GRADING # Hours / 1/90 Grade on Exam.

* Sufficient familiarity to fire and clear minor stoppages.

From Letter of Instruction 1544

"THE OBJECTIVE of all training in the Marine Corps is to develop pride and self-confidence, discipline, physical fitness, technical proficiency, initiative, adaptability to the varied conditions in the field, leadership, teamwork, and tactical proficiency in the individual and in the unit. The basic aim of individual training is to have every officer and man qualified to perform duty in the Fleet Marine Force in the field. Therefore, every marine shall be trained to employ the individual protective measures necessary to nullify or reduce the effectiveness of enemy action and shall have a familiarity with the effective employment of infantry weapons against the enemy in accordance with elementary combat principles.

"Commanding officers will avoid expending time that could be utilized for training, by devoting an unwarranted number of hours to police work, organized athletics, and in care and cleaning of individual equipment. It is considered that, except for actual instruction, the latter activity is a responsibility of the individual and must be performed outside of training hours. It is further considered that, periodically, the normal routine may justifiably be altered for short periods to provide intensive training. During such periods, any resulting reduction in liberty will not be detrimental to morale provided instruction is well prepared and presented in an interesting manner. Special privileges as a reward for achievement of above average proficiency might well be granted as an incentive to such a program."

The $64.00 question then becomes—how can we change the form of training record card to show what we want it to? Why enter training grades in service record books at all?

If we will increase the size of the training record card from its present size (5″ x 7″ approximately) to the same size as the classification card (8″ x 10″ approximately) and use both sides, we will have ample space to enter all the data we require. Each enlisted man should have his own training record card and all subjects he is required to know should appear on that card. A new training record card should be filled out for each man at the beginning of each calendar year, and training should be planned entirely on the basis of the calendar year.

The training record card, instead of being held in each organization for one year after the man is transferred, should be clipped to his classification card (thus becoming a part of his staff returns) and should be forwarded to his new organization. If this is done, it would be unnecessary to enter the grades in the service record book at all, which would save a great deal of time.

Is it logical to keep training record cards on file in an organization after a man has been transferred? The only purpose it could possibly serve is to indicate, to the Inspector General, the amount of training an individual received when he was serving with the organization being inspected. That should be unnecessary as men are practically always members of an organization long enough to complete at least one training cycle, and hence current training record cards will reveal the type and amount of training an organization is conducting. If it is desired to still retain the cards in the man's old organization after he is transferred, this can easily be done without any lost motion. Since we would have only one man's name on each card, we simply remove that card from the current training record card files, place it in a dead file, retain one year, and destroy it.

Upon transfer, when an individual's staff returns arrive at his new organization, the training record card will be delivered to S-3, detachment training officer, or company commander, as the case may be. The latter can see at a glance how many hours of training the individual concerned has received, how recently the training was given, and the average, final, numerical grade he made on each subject completed. He sees exactly what subjects the individual is strong and weak on and can schedule training to correct deficiencies. He doesn't even need to see the individual's service record book.

The suggested system of filing is to set up files alphabetically by ranks, according to training requirements, i.e., in the first file would be master sergeants, then technical sergeants, and next staff sergeants. These ranks require instruction in *all* subjects. The second file would contain sergeants followed by corporals; the third file privates first class then privates.

The suggested form for the enlisted training record card is shown on opposite page along with the proposed method of grading. The training subjects required for a staff, technical, or master sergeant are shown, fully filled out, for illustrative purposes. Heavy lines also delineate between the subjects required for corporals and sergeants, and privates first class and privates. The proposed training record card should be self-explanatory. USMC

In Brief

The Navy has completed plans for a nationwide network of Volunteer Automotive Transportation Units designed to train a pool of specialists to direct the use of Navy automotive equipment in case of national emergency. The program goes into effect 1 January, when the first units will be activated. Personnel attached to Automotive Transportation Units will meet ten times annually and receive two weeks of active training duty during each fiscal year. Other training will take the form of printed lessons covering such topics as garages, repair shops, spare parts, etc., and seminars dealing with laws related to transportation, upkeep of vehicles, preventive maintenance, procurement and interchangeability of parts.

Large-scale promotion of enlisted personnel to the first pay grade has been authorized by Headquarters Marine Corps for the first time since the end of World War II. Until October, 1948, all such promotions were blocked by an excess of first pay grade personnel in Marine aviation, but the recent reversion of 397 aviation master sergeants opened the way for 197 promotions in other functional fields. In addition, commanding officers have been authorized to nominate 760 men for promotion to the second pay grade and 2,272 for promotion to the third pay grade.

Commissions for officers of the Army, Navy, Air Force, Marine Corps, Coast Guard, and civilian components will be issued on a standardized form within the next few months. The new form, which will replace more than 40 forms of varying styles and sizes now in use, will be the same for all ranks as well as all services. The form will be an engraved document on which the name, rank, and other information will be typewritten.

A new dry process system using electrostatic principles which will take pictures, reproduce documents, and print on virtually any surface has been announced jointly by the Battelle Memorial Institute of Columbus, Ohio; the Haloid Company of Rochester, N. Y; and the Army Signal Corps. The process is called xerography. The Signal Corps, through its laboratories at Fort Monmouth, N. J., is sponsoring further research with respect to possible application in the field of military photography.

The first of three experimental all-metal twin-engined Chase C-122 "attack transport" craft has successfully completed its initial test flight a spokesman for the Chase Aircraft Company said recently. The new plane, a high performance powered version of the CG-118 glider, has been built to Army and Air Force specifications for economical transport of troops and equipment into forward areas, where prepared landing strips are not readily available. The C-122 is designed to carry a 10,000 pound payload and cruise at 200 miles an hour.

A tiny telemetering system weighing only a few pounds and capable of transmitting 24 different types of information simultaneously from a rocket traveling at nearly 3,000-mph has been successfully tested by the Navy Department at White Sands, New Mexico. Installed aboard the Navy's "Aerobee," the new unit functioned satisfactorily at an altitude of 71.78 miles above the earth at a maximum velocity of 2,830-mph. The instrument radioed to recording instruments on the ground data concerning flight characteristics, motor performance, cosmic-ray intensity, quality of sunlight above the atmospheric blanket, and changes in the strength of the earth's magnetic field.

Air Force gliders can now be brought to a quick stop on short landing fields. When an incoming glider is a few feet off the ground the pilot fires two "guns"—steel tubes filled with a black-powder charge and set at an angle on both sides of the fuselage. The detonation of the charge drives two 48-inch steel spikes deep into the ground. Attached to the spikes is a 54-foot length of undressed nylon rope which can stretch 400 per cent of its length. The rope is payed out from the fast-moving craft until it gently snubs the glider to a halt in a space from 200 to 300 feet.

Enlisted personnel of the Navy and Marine Corps who are high graduates, between the ages of 18 and 25, unmarried, and who made above average scores on their general classification tests now are eligible for flight training under the Naval Aviation Cadet Program. Civilian applicants for training as Naval aviation cadets still must have completed two years of college. The Navy Bureau of Aeronautics lowered the educational requirement to give more enlisted personnel the opportunity to become commissioned officers.

The world's brightest lights will be tested at the armed forces Landing Aids Experiment Station, Arcata, Calif., which is considered the foggiest spot in America. The U. S. Air Force has ordered for Arcata a system of newly developed all-weather approach lights which are designed to penetrate "zero-zero" fog for at least 1,000 feet. The system will include 36 of the world's brightest lights—3,300,000,000 peak candlepower each—and 35 lights of a somewhat lesser brilliance. Lined up in a row two-thirds of a mile long, the 71 lights will produce lightning-like flashes to guide fog-bound pilots to the Arcata airfield runway.

The Air Force is going to crash five radio-controlled B-17 Flying Fortresses into the waters off Florida in an experiment that may remove some of the hazards of ocean flying, it was announced recently. The test is intended to determine how plane crews can best land their aircraft on water and get out alive. Special cameras and other instruments in the "drone" planes will record the effects of the crash landings, which will be made in Choctawahatchee Bay near Ingland air base.

Sixteen Seabees will spend the coming winter at Point Barrow, Alaska, to test the warmth and other features of a new type prefabricated barrack developed for the Navy by the Douglas Aircraft Company. The 10,000-pound structure, which measures 20 by 48 feet, is designed to provide summer warmth in 65-below weather, withstand 150-mile-an hour gales and 13-foot snowfall on its roof. A special feature of the barracks lies in the fact that it can be erected by workmen wearing Arctic mittens. The only tools required are a mallet and socket wrench.

The U. S. Navy is beginning construction of the world's largest non-rigid lighter-than-air craft for long-range patrol over open ocean areas and the vast Polar ice fields, it was announced recently. Known as the N-1, the new craft will have a helium capacity of 825,000 cubic feet. Its gas envelope will be 324 feet long and 71 feet wide with a double-deck crew car 87 feet long underneath. Maintenance and repair in flight of the two 800-hp Wright Cyclone air-cooled engines will be possible, and living quarters will be available to the 14 man crew of the airship on the lower deck away from engines and control.

Development of an aircraft power plant which delivers more than 4,000-hp to a propeller, as well as several hundred pounds of jet thrust, was announced recently by the Air Force. Know as the Wasp Major-VDT, the new piston-jet propulsion combination consists of a 28-cylinder Pratt & Whitney Wasp Major engine and a two-stage General Electric variable discharge turbosupercharger. The VDT power plant enables heavy, long range aircraft to fly farther, faster and higher, and also enables planes to take off with heavier loads of cargo, fuel, or bombs. Rate of climb is also increased. Bombers powered with VDT can go into and away from target areas at high speeds and at altitudes of nearly eight miles.

The cruiser *Des Moines*, heaviest "heavy" cruiser in the world, will be the first Navy ship to mount completely automatic rapid-fire eight-inch guns. With her new eight-inch gun mounts, the Des Moines can lay down a barrage at battle range four times faster than any ship with guns of the same or larger caliber. In addition, the difficult job of gun-turret ammunition handling has been eliminated. From the time shells leave the ammunition room until they are fired, no human hand touches them. The entire process is automatic.

Naval activities having facilities for medical care of dependents have been authorized to provide such care for dependents of active duty personnel of the Army and Air Force in like manner as now provided for dependents of Navy and Marine Corps personnel. This new policy is in line with a recent policy announcement by Defense Secretary James Forrestal. The per diem charge for in-patient hospitalization of Army and Air Force dependents at naval activities within and outside the United States will be $1.75. There will be no charge for out-patient treatment.

Hydrozine, a motor fuel made of air and water, is being developed by the Navy. Its molecule is almost the simplest possible combination of the two basic elements, hydrogen and nitrogen. The fact that work on hydrozine and a companion fuel, nitromethane, was under way was announced recently. Hydrozine is considered to be an opening step toward becoming independent of carbon compounds, such as gas and oil, in some special fields of motor fuels.

Making of Morale (USMCR)

By Capt Lewis Meyers

IN THE PAST YEAR SEVERAL GAZETTE ARTICLES HAVE stressed the need for preventive maintenance for the traditions and customs of the Corps. The writers have presented cogent pleas for reviving and retaining vanishing customs in procedure, nomenclature, and uniform—all designed to make the Marine Corps once again the *old* Marine Corps they love so well. Their arguments can be reinforced by demonstrating why tradition must be kept alive.

Not just for sentimental reasons do we need the old Corps. It had best be resuscitated, and in a hurry, for a basic military reason: its effect on Reserves. Without the traditional marine on hand, the Marine Corps will not attract the type of man it needs in a national emergency. Lacking the old Corps spirit, any future wartime recruits will not be able to meet the demands of amphibious combat.

The global wars featured in this century call upon the Reserves to do most of the fighting and dying. This is not due to the surpassing bravery every Reserve hides beneath his civilian vest. It is just that, like the Lord's poor people, there are so many of them. As Col Thomason described the AEF marines of 30 years ago: "In the big war companies, 250 strong, you could find every sort of man from every sort of calling. There were Northwesterners with straw-colored hair that looked white against their tanned skins, and delicately spoken chaps with the stamp of the Eastern universities on them. There were large-boned fellows from Pacific-coast lumber camps, and tall, lean Southerners who swore amazingly in gentle, drawling voices. There were husky farmers from the corn-belt, and youngsters who had sprung, as it were, to arms from the necktie counter. And there were also a number of diverse people who ran curiously to type, with drilled shoulders and a bone-deep sunburn, and a tolerant scorn of nearly everything on earth. Their speech was flavored with navy words, and words culled from all the folks who live on the seas and the ports where our war-ships go.

". . . Rifles were high and holy things to them, and they knew five-inch broadside guns. They talked patronizingly of the war, and were concerned about rations. They were the Leathernecks, the Old Timers: collected from ship's guards and shore stations all over the earth to form the 4th Brigade of Marines, the two rifle regiments, detached from the Navy by order of the President for service with the American Expeditionary Forces. They were the old breed of American regular, regarding the service as home and war as an occupation; and they transmitted their temper and character and view-point to the high-hearted volunteer mass which filled the ranks of the Marine Brigade."

As in most writing about marines, the colonel has said it best in summing up the wartime function of the salty regulars. They serve as examples and mentors to the boys who come in to fight the war. His description of the duration marines of 1918 applies just as well to those of a generation later when the Corps again mushroomed. This time it was on a bigger scale but the FMF divisions showed the same spirit as the AEF battalions.

COMMITTING a force of 100,000 elite troops, well-disciplined and high in morale, is an impressive performance. The FMF of Iwo and Okinawa met those specifications and it is well to recall how it was accomplished.

To quote one of Baseplate McGurk's loquacious buddies, the bases of discipline are "self-pride, *esprit de corps,* and patriotism." Breaking down that analysis from the wartime Reserve point of view, patriotism is a really active aid only in the early days of conflict when the volunteers crowd the recruiting stations. These eager characters make good troops, for the old squelch about nobody asked you to join this outfit is psychologically sound. It ties in neatly with the quality of self-pride—for the man has obligated himself and must measure up to his own standards by meeting those of the organization he selected.

Self-pride in itself will produce few U.S. heroes, except in the quest for souvenirs. Americans are inclined to laugh off conscious heroics; their combat conduct always has been characterized by what one writer has termed a "shame-faced valor." To overcome his instinct for self-preservation, a man's innate self-respect must be reinforced by pride in his unit and loyalty to his comrades.

This leaves *esprit de corps* as the final and obviously most important component of discipline — and morale. You can spell the *corps* with a capital *C* and make its meaning more exact. Or, according to Col Thomason again, it is the phrase "which some Frenchman has defined as esteeming your own corps and looking down on all the other corps." Another of McGurk's tabletalkers

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Presently an executive in the Laguna ceramics industry, Capt Lewis Meyers has been a newspaper man, journalism instructor, a much-harassed troop leader in the 4th Division, and a frequent contributor to the MARINE CORPS GAZETTE.

There is just one time and one place to acquire a lasting belief in the importance of being a marine — in boot camp and preferably in the sandy isolation of much analyzed Parris Island.

sums it up by saying the men must "always remember they are marines."

IT IS THAT SPECIAL FEELING of being a marine that moves veteran officers to write articles decrying the loss of traditions that bolster the feeling. They have ample reason for their fears. If the time comes when the importance of being a marine is not paramount to members of the Corps, the organization will be meaningless, no matter what its paper strength nor how extensive its installations. Any weakening of that special marine feeling is inherently bad for the Corps, present or future, peace or war.

From the Reserve angle, the problem is both extended and intensified. As a civilian, the potential marine acquires his impressions of the Corps by random contacts over a period of years. When these contacts are via the Recruiting and Public Information Divisions, the civilian is impressed by an able presentation of USMC assets. Any reading of the combat performances of marine units adds to Corps prestige. The only other basis for civilian opinion is the individual marine seen or heard, usually on liberty.

If, in a national emergency, the civilian joins the Corps, he has to acquire the feeling of being a marine and acquire it in a hurry. In case of conflict, it will carry him through situations he could not tolerate in a civilian state of mind.

There is just one time and one place to acquire a lasting belief in the importance of being a marine—in boot camp, and preferably in the sandy isolation of Parris Island. Much has been written on PI but nothing so far has caught the intangible mental change of the citizen-to-boot-to-marine progression. Gerald Kersh has done it in *Sergeant Nelson of the Guards*, his study of the British prototype of the DI and his methods of turning assorted civilians into members of a proud Brigade.

Best results at boot camp come from attracting eager recruits with preconceived ideas of the Corps and with the determination to live up to them. With such fertile ground a good DI can make the marine way of life seem an end in itself. The recruit concentrates on meeting marine standards until gradually pride in self-achievement blends into pride of unit. Eventually he is making sure new replacements measure up to requirements, the final link in the self-perpetuating chain of morale that makes the Marine Corps.

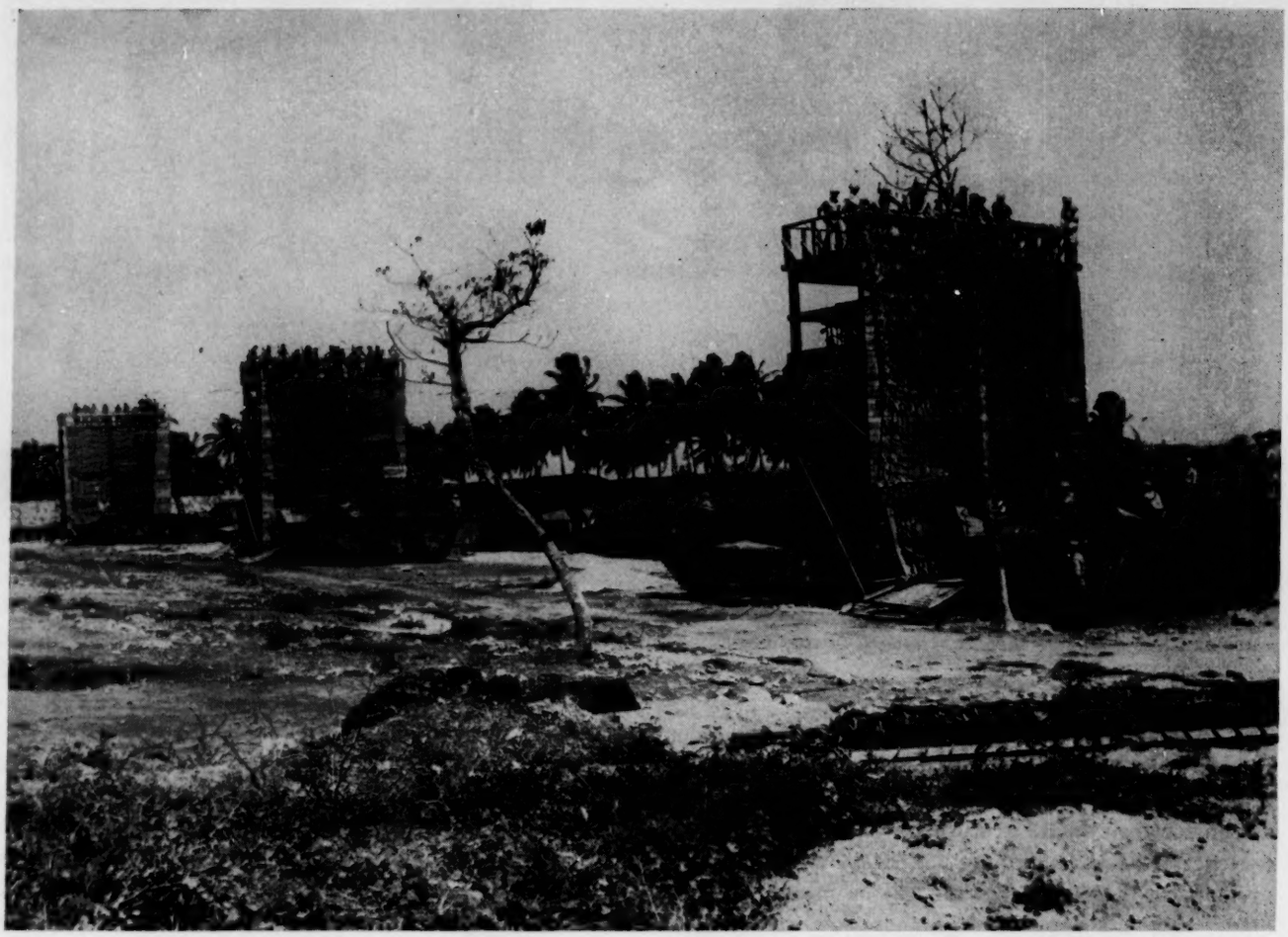
For the immediate future the Corps has attracted its quota of recruits. It has a backlog of veteran Reserves whose spirit traces back to the way they did things in the old platoon on Beach Yellow 2. The present problem is to make sure the stream of boots swelling this greatest peacetime Corps really become marines. The possible problem is to be ready to absorb again a sudden flood of duration marines and maintain the Marine Corps' record of performance.

In this respect the published pleas for a renascence of marine tradition in uniform, talk, procedure, and discipline take on an added meaning. These are the things that add up to the special feeling that makes marines—and can make a lot of them in a hurry.

It must mean a lot to be a marine now or it won't mean anything when it's a hell of a lot harder. There's an old saying that the Regulars keep the weapons clean between wars so the Reserves will be well armed for the fighting. It might better be said that the Regulars keep the spirit alive.

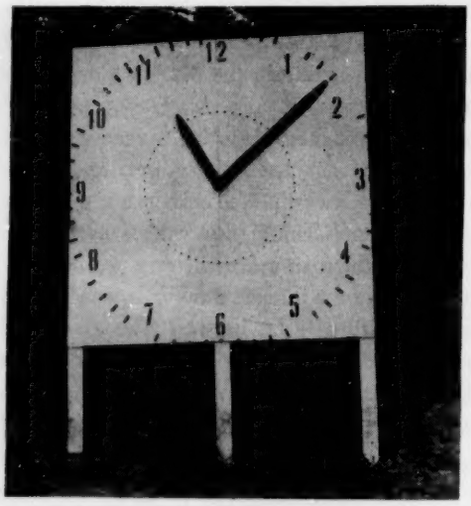
Even if the weapons go into mothballs, the traditions of the Corps must be kept shining—and without a speck of dust

USMC



30-foot mock-ups of Navy APAs represent the port and starboard side and the three decks of the troop transport.

Amphibious Training is Basic



Clock is used to indicate elapsed time during training exercises on mock-ups.

By LtCol Lewis W. Walt

AMPHIBIOUS WARFARE HAS SO LONG BEEN THE SPECIALTY OF THE Fleet Marine Force that we sometimes forget that training for it must be a *continuous and progressive process.* An FMF unit must be just as well prepared on 1 January as on 1 June to execute any amphibious mission which might be assigned to it.

To keep on their combat toes, the 1st Provisional Marine Brigade, based on Guam, requires that all units of the brigade participate in at least one ship-to-shore exercise per month. These exercises are on a battalion landing team level and involve all supporting units normally assigned to a BLT. As a training course for the exercise, the Brigade has built a dummy-run training area which includes a fortified beach (tactically located gun emplacements, barbed wire entanglements, and antitank ditches) and three 30-foot mock-ups of Navy APAs. Each mock-up represents the port and starboard side and the three decks of the transport. Each side of the mock-up is fitted with a standard Navy cargo net rigged in regular fashion from the "ship's" rail. The lower

The 1st Provisional Marine Brigade, based on Guam, requires that all units participate in at least one ship-to-shore exercise per month. These exercises are on a battalion landing team level and involve all supporting units of a BLT

end of each net falls into a surveyed LCVP. Hugging the LCVP on the outboard side is a surveyed LVT in the same relative position it would be in at the transfer line in a real ship-to-shore movement.

Each BLT works out its own tactical landing problem complete with an operation order and all the forms necessary for debarkation and the ship-to-shore run. When the BLT is in position at the foot of the mock-ups and the problem is about to begin, a commentator's voice booms out over the public address system:

"During the past few days you have received individual basic training in amphibious operations. This training has been primarily the instruction of individuals and boat teams in lashing and lowering equipment, descending a debarkation net, the conduct of troops during the ship-to-shore movement and the assault of a beach. The exercise today will include all these things and a few more.

"The beaches on which we will land are surrounded by coral reefs which prohibit the beaching of landing craft. This means that we will have to cross the reef in amphibian tractors. We will disembark from the APA into LCVPs. The LCVPs will take the boat teams to a transfer line where you will change to LVTs before proceeding to the beach.

"You have been given all the information available on the enemy situation. All troops have conducted debarkation drills aboard ship. You know your boat team number, the name of your boat team commander, the boat team assembly area below decks, the route to your debarkation station, and your plan of employment ashore. All equipment and weapons have been inspected by boat team commanders, ammunition and rations have been issued.

"The ship is now in the transport area. It is in condition One-Able. The boat teams are in their respective assembly areas ready to go to their debarkation stations on order. The landing boats are waterborne and are in assembly areas waiting to be called in to debarkation nets to receive troops. The LVTs are waterborne and enroute to the transfer line.

"Orders to the boat teams will be issued over this speaker system. The time interval between the landing of waves will follow the approach schedule as close as possible and will be shown on the clock."

"Boat team commanders move your boat teams to assembly areas in the order they will disembark!"

"At this time the naval gunfire is delivering an intense prelanding barrage, firing every weapon that has sufficient range to reach the beach. Rocket ships are saturating the beach area and planes will make strafing and rocket runs just prior to the landing of the first wave.

"The boat teams of the first wave proceed to their assigned debarkation stations, the men line up facing the rail, lines are made fast to equipment to be lowered, the boat team commanders make a final check of personnel, weapons, and equipment. Weapons are slung, belts unfastened, and helmet straps unbuckled. The landing craft are alongside ready to receive troops."

"Disembark!"

"Members of the boat teams descend the net four abreast, moving down as rapidly as possible consistent with safety. The net is kept full until all hands have gone over the side. The first men to reach the boat pull the net out from the side of the ship. Weapons and equipment are lowered over the fore and aft ends of the net."

"Second wave, man your debarkation stations!"

"The second wave boat teams are called to their debarkation stations as soon as approximately half of the personnel of the first wave boat teams have gone over the side.

"As soon as the first wave boat teams are waterborne the LCVPs cast off and go to the rendezvous area where they slowly circle until time for them to move to the transfer line.

"At the transfer line the column of landing craft pulls abreast of the column of amphibian tractors. The LVTs cut their engines and the landing craft move alongside and lash on. The boat teams transfer from the landing craft to the amphibian tractors."

"First wave transfer to LVTs!"

"Second wave—disembark!"

"The LVTs start their engines and move into line ready to proceed to the beach. Right on schedule the first wave crossed the line of departure and heads for the beach at full speed. Personnel stay down in the LVTs. Bayonets are fixed."

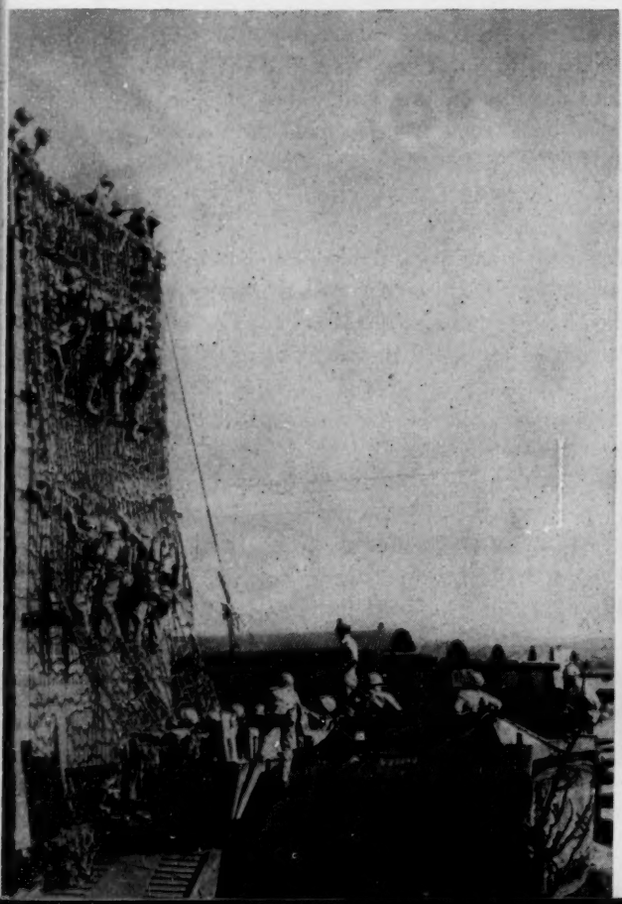
"You are now approximately 100 yards off shore—prepare to land."

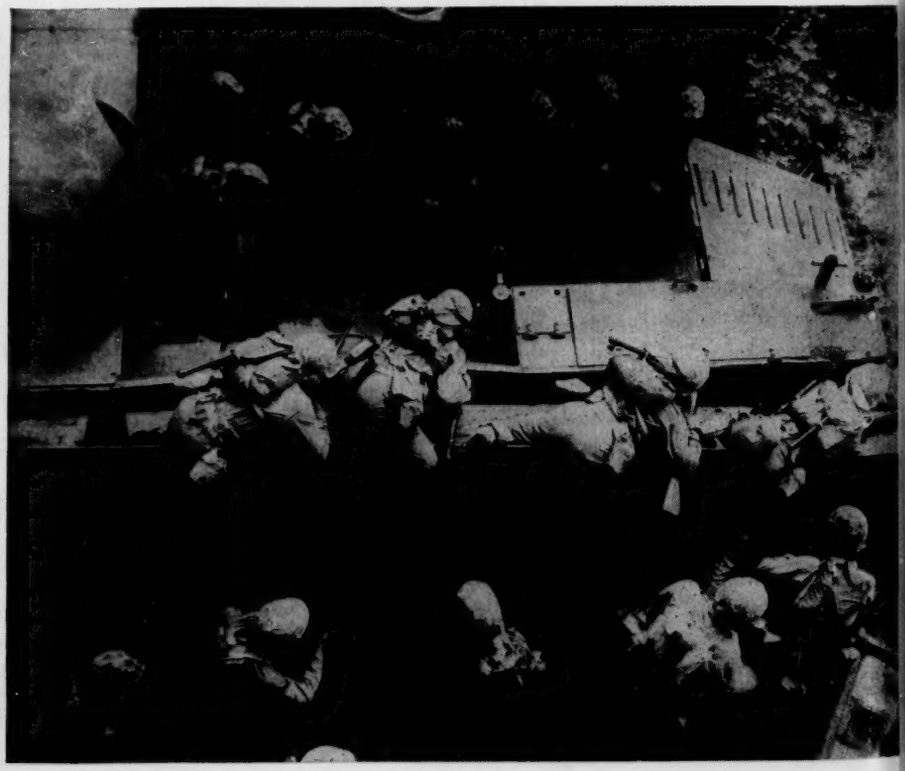
"Weapons are made ready, chin straps buckled, belts fastened. The LVTs reach the beach, swing to the right front and the ramp is lowered."

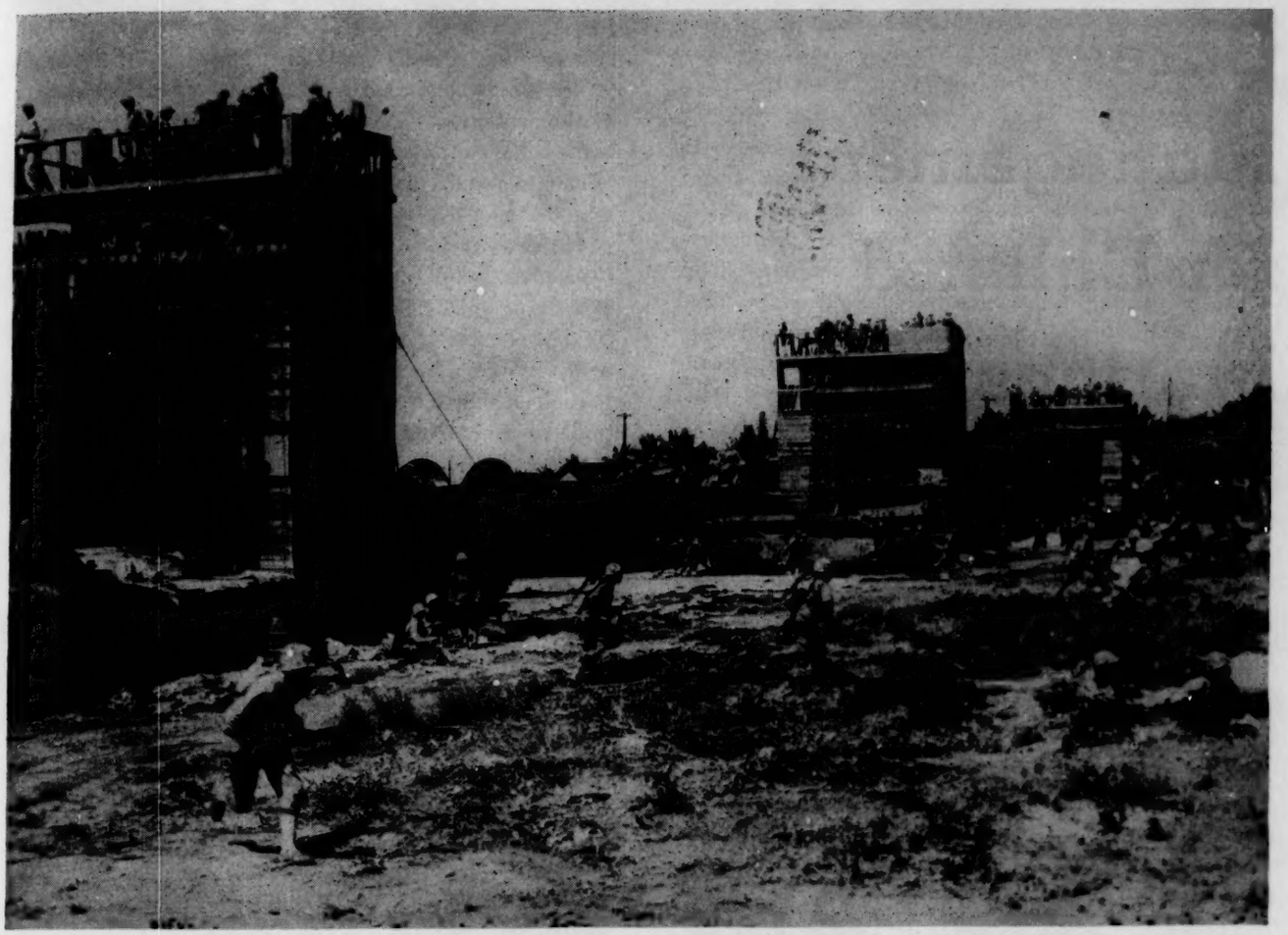
"HIT THE BEACH!"

So the problem continues until the last wave is ashore, the situation on the beach is well-developed, and the personnel of a battalion have learned (or re-learned) the most valuable tricks of their particular trade.

BLT is formed in mock-up area with boat signs and equipment prior to commencing the exercise. Members of the boat team descend the net four abreast, moving down as rapidly as possible consistent with safety. The net is kept full until all hands have gone over the side. The boat teams transfer from landing craft to amphibian tractors.







The 1st wave hits the beach while the 2d wave prepares to move onto the nets. 3d wave is at debarkation stations with the 4th wave below deck. Troops move out from antitank ditch at O-1 after reorganization has been effected.

Career Management for Enlisted Marines

By LtCol Bryghte D. Godbold and Maj Howard F. Uphoff

THERE WAS A TIME WHEN ENLISTED MARINES WERE a highly superior group—the elite group of the armed services. Objective analysis forces us to admit that this is no longer true. Since the end of World War II the Marine Corps has faced the critical problem of obtaining and retaining sufficient high-caliber enlisted men. Even with the impetus of the Selective Service Act of 1948 we are still faced with the problem of *quality* of recruits, if not quantity. We have failed in making a career in the service attractive enough to the more desirable individuals who are necessary for the efficient functioning of the Corps in these days of complex warfare.

What are the underlying reasons why we are not securing sufficient numbers of well-qualified recruits? Why do we not have more reenlistments of the quality of men we need?

The problem is complex and cannot readily be reduced to a single simple solution. Some forces operate to make a service career intrinsically unattractive by itself; others operate to make a service career less attractive than a civilian career. Basically, however, the solution to the problem can be divided into two major components: First, the mechanics of modifying the personnel system to make a service career more attractive; second, the improvement of the human relations aspect of service in the Marine Corps.

Among the more important forces that are currently operating to reduce enlistments and reenlistments is the present economic situation in the United States. With the country in the midst of the greatest economic boom in history and with industry, business, and agriculture short-handed, young men display little interest in the 75 dollars a month pay of the Marine private.

The recruiting posters which promise travel to the enlistee no longer lure men in quantities to the service. Formerly only the comparatively well-to-do visited Florida, California, and Hawaii. Today, with more liberal vacation periods and higher wages, even the semi-skilled worker can afford an annual tour of the country and some are able to go abroad. A young man can travel without having to join the Marine Corps for three years. Furthermore, the extensive travel of millions of young men during the past war has served to reduce the allure of travel as such.

Another factor reducing enlistments and reenlistments is the post-war attitude of the populace towards military service. People are fed up with war and consequently with soldiering. Veterans are glad that they were active participants in the war, but they desire no part of the military now. Nor do they encourage younger friends to enter the service.

Although the GI Bill of Rights is an excellent piece of legislation whereby veterans are granted free education and loans for building homes and initiating businesses, it at the same time serves to reduce greatly the number of reenlistments.

IT APPEARS FAIRLY OBVIOUS that the Marine Corps needs to discard its outmoded concept of recruiting and to take positive steps to make a service career more attractive for civilians contemplating enlistment and for men already in the service. In the past we have appealed to civilians to enlist under the slogan "Travel, Adventure, and Education." Results have indicated that this slogan is no longer capable of attracting sufficient numbers of acceptable candidates to the Recruiting Stations.

In order to bolster enlistments we have tried various measures, such as raising of maximum age limits and the lowering of physical, mental, and educational standards. In efforts to increase reenlistments we have attempted other devices, including paying reenlistment allowances, offering a choice of station upon reenlistment, and allowing reenlistment after a lapse with little or no loss of rank.

All of these have been of some help, but they have not solved the problem. Many of them are temporary expedients, reluctantly adopted, and are mere nibbles at the edge of the problem, rather than integral parts of a comprehensive plan resulting from a thorough attempt to get at the heart of the difficulty.

In order to solve its personnel procurement dilemma, it will be necessary for the Marine Corps to provide in its personnel system, in greater measure than heretofore, the things individuals look for in selecting their careers. The Corps must offer work that is challenging and interesting and yet in keeping with capabilities. It must offer a sense of achievement in the performance of the work and a recognition for work well done, including just promotional rewards. Monetary return must be fair, and present and future economic security assured.

Though we offer an applicant for enlistment a career

in the Marine Corps, our offer is somewhat nebulous. If we promise careers, we must formulate a comprehensive long-range plan to carry out that promise. This planned program must afford the chance for a young man to select a field of work in the Marine Corps based on his interests, aptitudes, and background. He should have a reasonable expectancy of remaining in his chosen field of work but should have opportunity to select another type of work if he is unsuited to that originally chosen. Formal schools and self-study courses as well as on-the-job training must afford him means to improve his knowledge and skill in his career field. He must have equal opportunity with all other marines for promotion to the top enlisted rank and into the warrant and commissioned officer categories. His promotion must be on a competitive basis and he must be assured that demonstrated proficiency is the criterion for selection to a higher rank.

Numerous advantages would accrue to the Marine Corps from a career management program such as this. Better caliber individuals would be attracted to and retained in the Corps because the steps and qualifications for planning and progressing in a military career would be clearly defined. Career management would be a valuable procurement aid, would tend to stimulate enlistments, and would enable the Marine Corps to compete better with industry, and with the Army, Navy, and Air Forces which are strongly stressing career advantages of enlistment in those services. In addition, individuals would be placed and retained in that field of Marine Corps work in which they have the greatest interest, aptitude and qualifications. Improvement of individual efficiency through more purposeful training and employment of individuals would afford marines a planned, rounded and balanced career within their field of work. The Marine Corps would be better prepared for wartime expansion because the proper balance could be maintained of highly trained personnel qualified to fill appropriate command, staff and specialist positions on all levels and prepared for rapid promotion in the event of emergency.

✠ AT THE RECRUITING STATION, Travel, Adventure, and Education would continue to be publicized to John Doe since some desirable candidates are attracted to the Marine Corps by this slogan. The major emphasis, however, would be placed on explaining to John the opportunities of a life-time career in our service. The entire discussion would be geared not to selling John on the idea of enlisting for a few years. But rather, would be expressed in terms of the advantages of a permanent service career. The psychologically undesirable situation of starting a man in the service with the concept that he is embarking on a temporary adventure of three or four years after which he will return to civilian life will be avoided. He will be shown the economic advantages of making the Corps his life's work. The value of the "hidden" additions to base pay, such as food, clothing, shelter, post exchange privileges, and medical care, will be explained to John as well as the liberal retirement benefits to which he will be entitled.

The applicant will be shown diagrams of the many occupational fields, such as Infantry, Band, Communication, Aviation, Motor Transport, and the like, which exist in the Marine Corps and from which he has an opportunity to make his selection. These charts, a hypothetical example of which is shown in Figure 1, will show Doe the jobs that exist in the occupational field, the relation of the jobs to each other, and the channels by which he may progress from private to master sergeant, and on to the warrant officer and commissioned ranks. The recruiting sergeant will explain the nature of the various jobs in any occupational field in which John displays interest. He will be told that he will be assigned to one of these fields on the basis of his background and civilian experience if he has any that is of importance, his aptitude test scores, his interest test scores, and his expressed desire. Furthermore, he will be told that he will not be placed in a field until he has completed his recruit training and has served an indoctrination period of six months in the Fleet Marine Force Such preliminary training, it will be explained to John, is necessary for two reasons: to familiarize John Doe, who thinks a mortar crewman works in the dispensary, with the different jobs in the service so he can make a more intelligent final choice of an occupational field, and to continue the long-standing policy of making every man a marine first and then a specialist.

✠ DURING his recruit training, John will be given a series of highly efficient aptitude and interest tests. The results of such tests will show his aptitude for and interest in different fields of work, such as clerical, mechanical, electrical, statistical, musical, and the like. He will be interviewed by a highly trained career guidance technician who, after securing the test results and information on Pvt Doe's background and his expressed choice of occupational fields, will advise him, on the basis of the best scientific evidence, of the type of work he appears best suited for. Every effort will be made to allow John to make a tentative choice of an occupational field, but he will be warned if it appears that he will be unsuccessful if his selected field is assigned. The technician will make entry on the classification record of his own recommendations for appropriate occupational fields as well as the first two choices made by the recruit. This detailed screening procedure is accomplished at the Recruit Depot in order to ease the administrative load in the field after men have completed their indoctrinational training in the Fleet Marine Force.

Upon completion of recruit training, John and the other men in his platoon will be sent to the Fleet Marine Force for a period of approximately six months. In all probability he will be trained in an infantry organization; however, he might be trained in an artillery or possibly an engineer unit. At the conclusion of indoctrinational training, PFC Doe will again be interviewed by career guidance technicians prior to being definitely assigned to an occupational field.

During the interview John, who now knows something about the Marine Corps, will be asked if he still wishes to be assigned to one of the occupational fields which he chose at the Recruit Depot. In the event he now desires a new field of work, the technician will advise him as to whether such a career is compatible with his aptitudes, interests, and background. It will be pointed out to him that this entire procedure of assignment has been worked out to result in the placement of individuals in those fields of work in which they will be most successful. In all cases, every effort will be made to allow each man as much latitude as possible in choosing an occupational field commensurate with his capabilities and the requirements of the Marine Corps.

JOHN will then be ordered to an organization where he will receive basic training in his chosen field (except if his case is one in which school training is indicated at this stage). At the time of his assignment, he will be a private first class. In addition to on-the-job training, self-study courses will be made available to qualify him technically for promotion to corporal. His commanding officer will insure that he has opportunities to perform all duties in which knowledge or skill is required for advancement. At the end of the minimum time in grade and if recommended by his commanding officer, PFC Doe will take two examinations: a General Military Subjects Test based on the material enumerated in Letter of Instruction No. 1544, and a technical examination based on the qualifications for promotion for his military occupational specialty, to be found in the new manual which is currently under revision. Promotional qualifications in this manual will be in terms of detailed and specific statements of things an individual must be able to do and subjects he must know at the various pay grade levels within each specialty. Details of the proposed testing system will be discussed later.

As at present, if John possesses certain qualifications, he, together with other selected marines will be ordered to specialist's schools operated by the Marine Corps and other armed services. In addition to these formal schools, organizations will operate local schools as needed for the training of personnel for semi-technical jobs.

Prior to promotion to the third pay grade, John, as a sergeant, will attend a Leaders School where he will receive advanced training in all basic military subjects. Emphasis, however, will be centered on discipline and the development of leadership and instructional ability. This school will increase Sgt Doe's individual military efficiency, will improve the individual military efficiency of lower-ranking marines as a result of the development of higher standards of leadership, discipline, and instructional ability in the graduates, will serve as another criterion for selection for promotion to the staff grades, will serve as a selection device for "earmarking" Sgt Doe as a potential warrant or commissioned officer, and, concomitantly, will act to restore in great measure the pre-war status and prestige of senior noncommissioned officers.

AT PRESENT, the Marine Corps does not have a real career management program for its enlisted personnel; however, a sound foundation exists upon which such a system can relatively easily be constructed. In the succeeding paragraphs the various measures needed to effect such a program will be discussed. Some of these steps are things that are underway and are required of themselves for a more effective personnel system, but will also be useful if a career management program is adopted. Others are additional measures that would be required in the event of adoption of such a program.

No personnel system is worth its salt unless the jobs that exist in the organization are properly identified. The efficiency of both personnel planning and personnel operation are dependent upon the accuracy of such information. Accurate identification and description of Marine Corps jobs is a prerequisite to combining such jobs into groups of functionally and promotionally related jobs or occupational fields. In the past the information on Marine Corps jobs has been obtained by diverse methods which were most expeditious at the time and has never been systematically validated against the duties actually performed. Consequently, present data for Marine Corps jobs are inadequate for efficient personnel planning and operation. Furthermore, the data are unsuitable for use as a framework upon which to base a sound system of occupational fields.

At present Marine Corps jobs are grouped into 20 functional fields, and each job within a field is assigned a terminal rank, beyond which a man holding that job number (SSN) cannot be promoted. The enlisted promotion system, based upon competition within each functional field and regulated by the terminal rank, is the best ever devised by the Marine Corps.

However, there are defects which should be corrected. Some jobs are placed in the wrong functional fields, while some functional fields are too broad, containing totally unrelated groups of jobs. In some instances, when a man holding a certain SSN reaches the terminal rank there is no outlet upward to a functionally related job.

Such men transfer to another group of jobs or to another functional field. This is inefficient, for the Corps must train him in his new job and must train his replacement as well.

In some functional fields opportunities for advancement greatly exceed those in other fields. This is not a defect in the promotion system as such but is caused primarily by improper allocation of pay levels. There are instances where the duties, responsibilities, and skills involved justify T/O authorization in higher pay grades. A correction of this defect would increase promotional opportunities in certain fields. Conversely, higher pay grades than warranted have been authorized on some T/Os. Adjustment of this would bring these excessive promotional opportunities to a level consistent with the Marine Corps as a whole.

In order to provide necessary detailed information on all Marine Corps jobs, an analysis of the nature of each job has been accomplished by the Personnel Research Section of the Personnel Department. The information obtained consists of accurate and complete identification of the job, of the tasks and responsibilities comprising it, and of the qualifications necessary for its successful performance.

This information is being used to revise the current *Manual of Military Occupational* Specialities, which will be completed approximately the first of 1949. In this new manual jobs will be grouped so that related jobs will all be together; they will be grouped into what will be called *Occupational Fields*. A new codification system is being devised so that all jobs in the same occupational field will have the same initial digits. Each occupational field will be preceded by a diagram similar to that shown in Figure 1, which will show the relationship of the various jobs to each other, the normal channels of promotion, and the pay grade limits of the various jobs concerned. Following such a diagram will be a section containing the descriptions for each of the jobs in this occupational field. Under each description there will also be included the qualification requirements at each pay grade at which the job is authorized.

The pressure of demobilization work delayed the

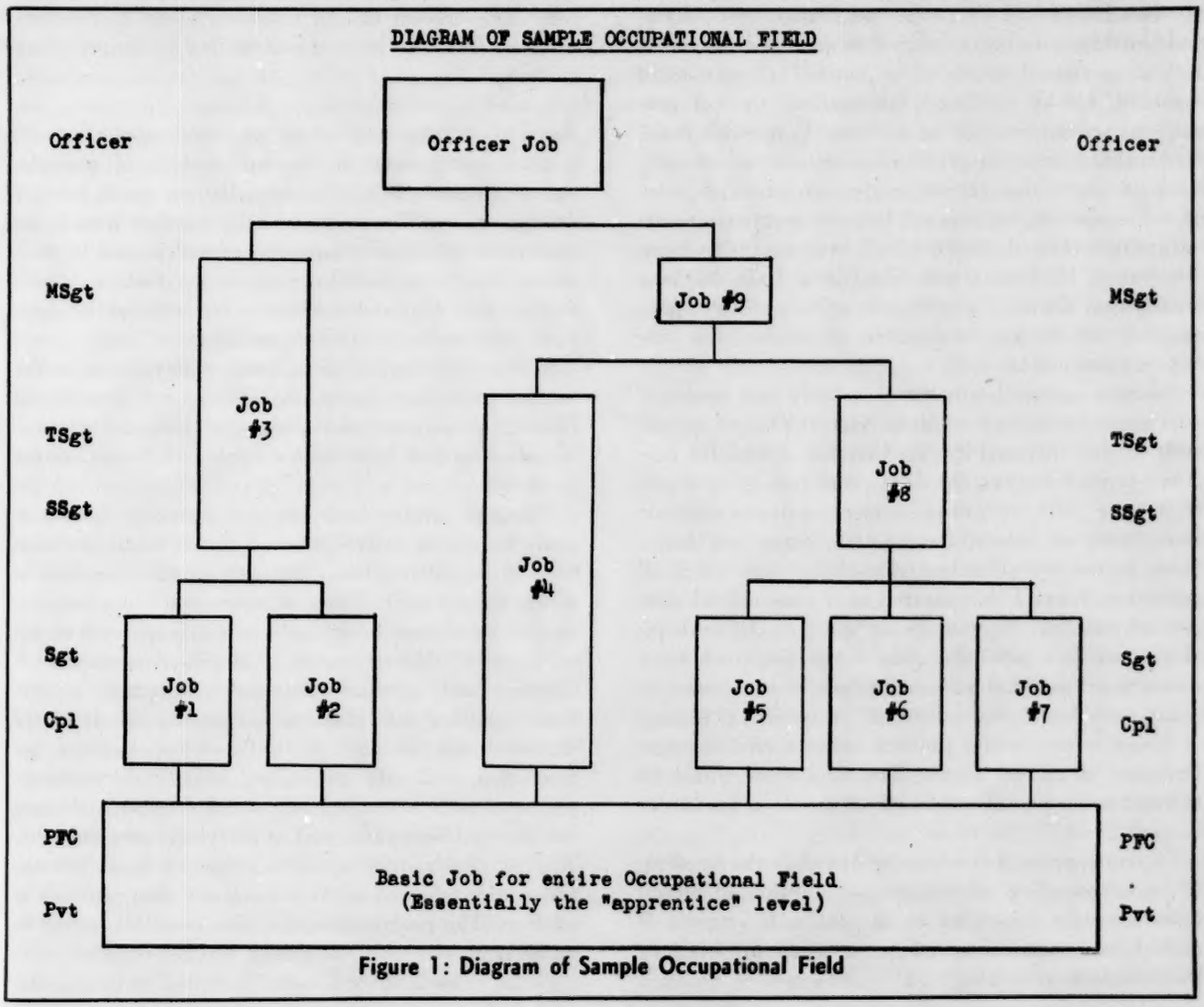


Figure 1: Diagram of Sample Occupational Field

planned revision of the current Classification Regulations published in tentative form in 1945. Their tentative nature, and considerable modification in Marine Corps personnel procedures necessitated the complete revision which is now underway.

The preceding section explained a current project which has as one of its objectives the establishment of occupational fields. The new *Classification Regulations* will establish procedures and regulations for entering an occupational field, for moving up the promotion ladder and for changing from one occupational field to another. The primary objective of the revision is to provide a system meeting current personnel needs and anticipated needs in the event of war. The new regulations were completed before the end of 1948 and it is planned to incorporate them in the new Marine Corps Manual.

THE PRESENT enlisted promotion system provides that all enlisted personnel within a given field of work compete with each other on a Marine Corps-wide basis for available promotions in that field. Such competition can best be affected by the use of promotion examinations. Aside from being inferior measuring instruments and uneconomical in terms of number of man-hours expended, locally produced examinations do not permit comparison of results on a Marine Corps-wide basis. Standardized, centrally-produced examinations not only result in scores that permit comparison of all eligibles on the same scale, but also will be more accurate measuring instruments and ultimately will be considerably more economical. A Testing and Educational Unit has been organized at Marine Corps Schools, and one of its responsibilities will be the development of standardized promotion examinations.

Presently, promotion to the first three pay grades is determined by scoring of fitness reports plus an adjustment for seniority and length of service. Under the projected promotion plan, the final promotion score would be a more valid indication of merit, being a multiple score based on several factors. Of course, one factor would be the over-all military knowledge expected of all marines and would be measured by a standardized military subjects test. Another factor is technical knowledge of the marine's particular field work, measured by a standardized technical subjects test geared to the occupational specialty of the individual. A numerical scoring of fitness reports would produce a factor covering performance of current duties. The final score would be adjusted to compensate for length of service and seniority in rank.

Currently, promotion to private first class can be effected by commanding officers upon completion of recruit training, while promotion to corporal and sergeant is made by the commanding officer on quotas furnished by Headquarters.

The present system of examination is not only haphazard and non-standardized, but does not evaluate the technical ability of a man to do the job described in the *Manual of Military Occupational Specialties.* Under the new system men in the fifth and sixth pay grades with the requisite time in grade and recommended by their commanding officer will be given a military subjects examination and a technical examination.. The results of these tests will be two of the criteria for selection for promotion.

All examinations, bonth in military and technical subjects, will be produced at the Testing and Educational Unit and forwarded to commanding officers for administering. Dates for giving specific examinations will be set by Marine Corps Headquarters for the entire Marine Corps, probably every six months. Candidates' tests will be returned to the central testing agency for machine scoring, and the results of examinations for promotion to the first three pay grades will be forwarded to Headquarters for use by the Noncommissioned Officers Selection Boards. Examination scores for promotion to corporal and sergeant will be furnished to the men's commanding officers to be used as described in the preceding paragraph.

THE STANDARDIZED objective examinations that are planned will consist of varying numbers of multiple-choice questions, depending upon the pay grade level of the examination. The multiple-choice question form is the most versatile objective type devised and is used in most standardized examinations, such as the General Classification Test, Mechanical Aptitude Test, Officers Selection Test, and the Radio Technician Selection Test.

In order to complete plans for the carrying out of the enlisted promotion system, the Testing and Educational Unit will prepare and promulgate materials and information showing how individuals can prepare themselves for promotion.

The first military subjects examinations should be ready for use in early 1949, and the technical examinations in late 1949. The advantages of this examination system include the increased efficiency and better preparation of individuals to do their jobs arising from stimulating study. Morale would be improved because of a clear-cut and specific competitive promotion system. Better qualified individuals would tend to remain in the Marine Corps because of increased opportunities for promotion, while the unqualified individuals would be prevented from advancing and would drop out, relieving the Marine Corps of the cost of carrying such deadwood. The cost of retraining would be reduced through minimization of unplanned shifting from one field of work to another. The promotion system for reservists would be on an improved basis, paralleling that for regulars.

to be concluded

Passing in Review

BOOKS OF INTEREST TO MARINE READERS

The War Novels . . .

THE YOUNG LIONS—Irwin Shaw, 689 pages. New York: Random House $3.95

In a country where thinking has become a specialized field, much like dentistry, law, or politics, where interpretations of life and world events are ceaselessly poured out over the air, on the printed page, and on the screen, where opinions are canned, issued, and consumed in the same manner as toothpowder or tomatoes, it was inevitable that the people, spurred on and tutored by professional literary critics, should set up prizes and great clamor for a novel which would in one convenient package encompass all there is to know and feel about war. That this lucrative opportunity would exist was clearly foreseen by established and would-be authors everywhere. And particularly in America, where there was never any real thought of losing the war, it is easy to imagine that the first rough notes for thousands of embryo war novels were roughly scrawled or neatly typed on Sunday, December 7, 1941.

Since the end of the war, the survivors of those embryos (some 270 of them) have been appearing in print, first in a great rush and now at a more deliberate, dignified pace. Some of these interpretations of war have received extravagant praise, some have been virtually ignored; some of those which were loudly hailed in the first heat of publication have now been reconsidered in a more temperate light and down-graded. Some have been converted into plays and movies, and many have made money for their authors and promoters. Yet the Grand Prize is still unclaimed. That select group whose job it is to pass judgment on American literature wants to shop around a little longer—they haven't found exactly what they had in mind. And while they may be forced by the pressing prospects of the future to hand out a reluctant Blue Ribbon, it is still interesting to speculate on the failure of World War II to produce a great war novel.

In selecting *The Young Lions* as a vehicle for this speculation, the reviewer does not imply that the book is dull or weak. It is neither. It is, perhaps, the best effort toward the stated goal—certainly it is one of the most ambitious efforts. Like two of its fast-selling mates, *The Crusaders* and *The Naked and the Dead*, it attempts to capture the essence of war with a vast number of words—perhaps on the theory that if you write long enough you will be bound to get the right words in the right combination. Curiously, a much more accurate picture of men at war can be found in that slim volume *Mr. Roberts*, a book, incidentally, in which no one killed or was killed, in which the enemy never appeared.

It may be that there is some significance in this matter of length. It may be that the authors, in trying to tell too much about too many people, lose in the process the only thing which, in the final analysis, they can truly tell about war—that which they themselves feel. It is true, of course, that war affects different people in different ways. But is it possible (and even if possible, is it desirable) to record the feelings and reactions of a cross-section? Does the experience of war make for abnormal divergencies among the reactions of affected people? Or does it channel environment-conditioned reflexes into a narrower range? Whatever the answer to these questions, it would seem that the experience of war is most validly recorded when the author holds true to the things that *he* saw, thought, and did in war; for if he attempts to project himself into the minds of a diverse group of characters, no matter how clever he may be with words, he is not likely to produce any one character who rings entirely true. And the war novel, perhaps more than any other form of fiction, must ring true because it will be intently searched for familiar things by readers who need to know that their response to war was shared by others.

The war novel should be believable in all respects. It should not dwell on the incredible things that could and did happen; rather, it should dig out and stress the continuous thread of routine which runs through war and makes it bearable. *Mr. Roberts* caught this, and the book is good because of it. *The Young Lions* (and *The Crusaders* and the *Naked and the Dead*) caught it seldom if at all.

And finally, the war novel, to be above reproach, should be technically accurate. In this respect, *The Young Lions* is good—not up to *Mr. Roberts*, but superior to the other two we have mentioned. But the professional soldier may raise his eyebrows when 13 Germans with two machine guns and a mortar completely wipe out 80 British troops, or when one German machine gun (at a range of over a thousand yards) plus

ten mines accounts for an American platoon of 42 men. The reader will observe, in fact, that the author has little good to say about the soldierly qualities of the Allies—it was, he seems to feel, their preponderance of materiel that won the war.

By way of justifying this review, it should be said that Mr Shaw's book is built around three soldiers, two American and one German. The book picks up all three (along with assorted girl friends) in 1938 and carries them into 1945 and Germany, where all three come together in a fairly disastrous fashion. A considerable amount of space is devoted to anti-semitism and sex, both topics being, of course, in the prevailing fashion.

The author, Irwin Shaw, seems to have been a combat correspondent during the war. He has written several plays and short stories before, this being his first novel. HS

The Eisenhower Story . . .

CRUSADE IN EUROPE—Gen Dwight D. Eisenhower, 599 pages, index, illustrated, charts. New York: Doubleday and Company, Inc. $5.00

That the invasion of Europe in World War II was a crusade, in the traditional sense of the word, a battle with the powerful forces of evil, is the burden of Gen Eisenhower's personal account of the war in his own story, *Crusade in Europe*. The revelation of the man that becomes evident in the words of the former Supreme Commander of the Allied military forces betokens his firm conviction that only by the utter destruction of the Axis would a decent world be possible. Throughout the entire course of the war, and in all his dealings with the various facets of the conflict, Gen Eisenhower displays this deep rooted conviction that this was a crusade. Therefore, he has no tolerance for the time honored tradition that all professional soldiers are really comrades in arms and that the conquering commander should receive a conquered general; never once until the surrender at Reims did he even speak to a German general.

Of the many who have written and perhaps will continue to write about this greatest war that the United States has ever fought, certainly no one can possibly speak with the authority and conviction of Gen Eisenhower. For it was his leadership and his judgment of men and of facts in the procession of events from the preparation for invasion to the victory that was decisive. And yet there is a surprising paucity of "I's" in *Crusade in Europe* and nothing of malice; in fact the author's modesty and tolerance is disarming. Although the work is authored by a man who never had written a book of general interest, it has already been appraised by historians as both great history and a great book. That it is such a book is due in great measure to the fact that it is the personal work of an author whose greatness in the field of command was distinguished by his modesty, tolerance, and frankness. *Crusade in Europe* is much more than a history of the war in Europe. It is the General's own, intimate narrative of a great piece of the world's history which he personally helped to fashion, and his account of its events is a comprehensive, stirring, and impartial one, full of revealing ancedotes and compelling incidents.

It is monumental task to incorporate within the covers of a single volume the story of America's contribution to the greatest conflict in Europe, and the story of the largest and most intricate assault ever to cross the sea is fraught with many memorable historical episodes which merit volumes in themselves. However, the alliance of many peoples into a massive striking force, the coordination of the modern weapons of land, sea, and air into a single dagger of destruction, the development of the ground strategy for this great undertaking, the epic of planning and plotting—all are told in *Crusade in Europe* in simple, yet brilliant and forceful words.

Military readers as well as civilian readers can learn much from Gen Eisenhower's account of how the United States went about fighting its greatest war, about the value and necessity for cooperation among the arms of the service and among the fighting forces of allies. The study of the operation against Sicily and Salerno, described as the greatest amphibious attack in history, is a careful, critical, and valuable analysis of this method of warfare. The treatment of the concept and the early history of air support as envisioned by the air forces and army proponents, as well as by the British, merits the attention of all students of this vital aspect of modern warfare.

The picture of Operation Overlord as presented by Gen Eisenhower is an historical documentation of the development of this supreme and magnificent enterprise and one which compels the interest and attention of the reader with the weight and vitality of its words. For the reader feels that in the narrative he is being given a personally conducted tour of the operation in the vanguard of the forward echelon which is, indeed, the case.

Particularly notable throughout the book are the delightful sketches of the great figures in the international drama, sharp, incisive portraits of such historical personages as Roosevelt, Churchill, Patton, Montgomery, and Marshall. Pungent episodes and incidents, simply told ancedotes and facts, and descriptive passages and paragraphs bring these leaders and associates into focus so sharply that the reader feels projected into their realm. The portraits of the lesser men who march across the stage of operations are clear and revealing and all the characters are there in proper perspective—individualistic military characters, brilliant commanders, contributing civilians, and the individual soldier—not just men-

tioned in passing, but set off in sparkling recollection by their former commander.

In the light of the present developments in the Berlin stalement, Gen Eisenhower's chapter on Russia after the close of the fighting invites careful reading. In spite of his admiration for the Russian soldier, as a fighting man, and for the Russian people whom he describes as "generous," the General is outspoken in his appraisal of the character of Communism. He emphasizes that the United States and the Soviets are, ideologically, in diametric opposition, that Communist fanaticism is undermining the freedom of mankind by tearing down all governmental structures based upon individual freedom, and that the compelling necessities of the moment leave us no alternative to the maintenance of real and respectable strength not only in our moral position and economic power but in military preparedness. The General's concluding words to this chapter immortalize what should be the thought of all Americans at this time. He says, "If the men and women of America face this issue as squarely and bravely as their soldiers faced the terrors of World War II, we would have no fear of the outcome. If they will unite themselves as firmly as they did when they provided, with their Allies in Europe, the mightest fighting force of all time, there is no temporal power that can dare challenge them. If they can retain the moral integrity, the clarity of comprehension, and the readiness to sacrifice that finally crushed the Axis, then the free world will live and prosper, and all peoples, eventually, will reach a level of culture, contentment, and security that has never before been achieved."

The General's treatment of the "stormy petrel" figures whose cantankerous individuality sometimes necessitated the employment of supreme diplomacy, is both fair and benevolent. His differences with Patton, Montgomery, and Churchill at times were irritating and serious, and they might well have taxed the patience of a less endurable leader. Yet, the General displays his deeply human and understanding regard for the opinion of others, being careful at all times, however, to assure that he was the Supreme Commander of the Allied Expeditionary Forces. This characteristic honesty on the part of the Supreme Commander is evidenced in his frank treatment of the mistakes that were inevitable, and he assumes the responsibility for the reverse of the Battle of the Bulge and the errors of the Tunisian campaign. And there is no bitterness souring the General's memory of these crises. His differences with the British over matters of strategy, his dealings with personalities in vital issues, and his concern over blunders in planning and tactics all betoken his calm, collected, and superlative judgment.

The author has produced a work that is a polished product replete with excellent cartography and impelling illustrations. Its footnotes have been arranged together

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with a glossary, appendices, and index in the back of the book. As a matter of English prose, the General has demonstrated that in his hand the pen is, indeed, as agile as the sword. But *Crusade in Europe* was not written in the ordinary way. Rather it is characteristically individual in that its quarter million words were dictated by the former Supreme Commander to two secretaries, and two military experts were employed to check every fact, date, name, and circumstance. The result is, surely, a scholarly, personal, unsentimental saga of democracy's crusade of conquest, from the heart and mind of an heroic leader who brought to successful realization the hopes and dreams of millions on two continents. **RPMacG**

Picture Book . . .

HIT THE BEACH!—Your Marine Corps in Action—Maj William P. McCahill, USMCR, Consulting Editor. 386 pages, illustrated. New York: William H. Wise and Company $4.95

Here is a book for the souvenir gatherers who want to add a photo album of Marine exploits to their collection. It contains some 700 captioned photographs, most of them official Marine Corps and many we have seen before.

Beginning with a foreword by Gen Clifton B. Cates, the book continues with "Mobilizing the Marine Corps for World War II" by Gen Thomas Holcomb, "Guadalcanal" by Gen A. A. Vandegrift, "Tarawa" by LtGen Julian C. Smith, "The Marianas Campaign" by Gen Holland M. Smith, "Iwo Jima" by LtGen Harry Schmidt, "The Okinawa Campaign" by MajGen Lemuel C. Shepherd, Jr, and "Marine Corps Aviation" by Col Clayton C. Jerome. Photographs of other Marine campaigns are included in their chronological order but are not given the emphasis they perhaps deserve.

These brief one and two page accounts of certain campaigns and other topics by prominent marines divide the photographs into logical sections. Simple sketch maps are used to illustrate the campaigns mentioned.

A section of photos and sketches of Marine activities from Tun Tavern to Shanghai 1936, a list of Congressional Medal of Honor Marines of World War II, and biographical notes on the Marine generals authoring sections of the book complete this work.

This book does not live up to the jacket blurb (but what book does?) and it is not one for which the professional marine will go out of his way to add to his library. Also the quality of paper and photo reproduction hardly justify the price asked.

Maj McCahill, the consulting editor, was a Marine public relations officer with the 4th Division and CinCPac during the war. He also authored *First to Fight* which was published early in the war.

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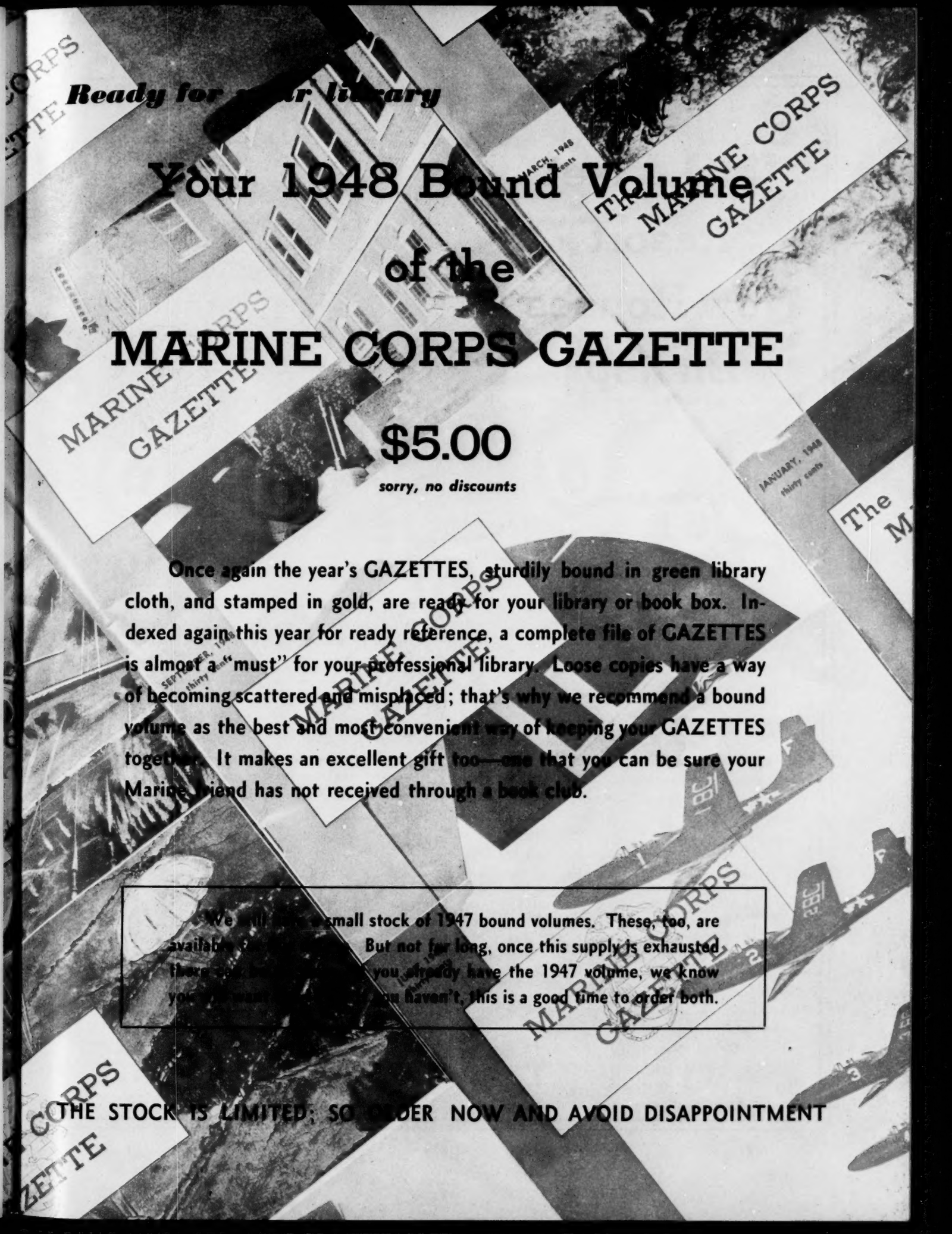

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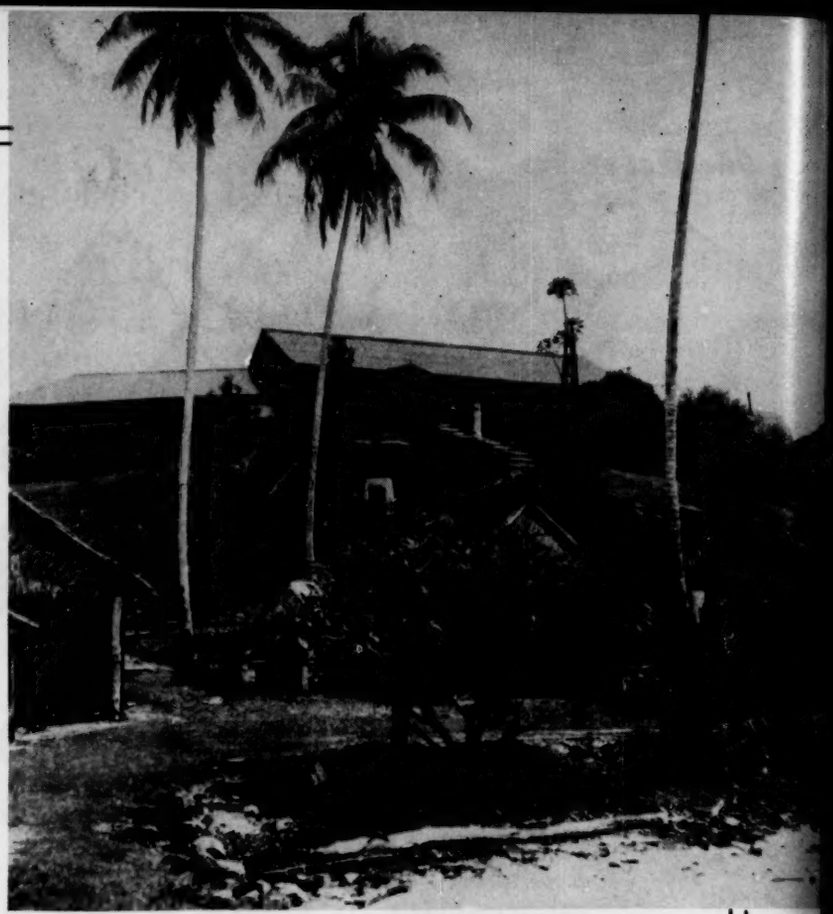

By Walter Sullivan

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GONE FROM THE IRONBOTTOM BAY CLUB AT Purvis Bay, Tulagi, are the slot machines, gaudy murals of girls, and polished bars. The place now shelters an Anglican prelate, the Right Rev S. Gething Caulton, Bishop of Melanesia.

The shell of the luxurious [for the Solomons] officers' club, perched on a steep bluff at Lyons Point, stands as it was when built by Seabees in 1943. But officers such as Capt Harold Stassen, assorted admirals, assorted ensigns, and others who slaked their thirst here would never recognize the interior.

When Purvis Bay was the United States Fleet's main base in the Solomons, cruisers and destroyers steamed in column into its narrow shelter. Swarms of khaki-clad officers climbed the long stairs of Lyons Point bluff.

Usually they found that there was not enough beer. As a rationing device there was a ship's bell that was rung about once an hour, signaling everyone to line up for another round. There is still a ship's bell. Now it calls natives to prayer in the chapel—formerly a mess hall.

The wing of the club known once as the "Brass Hat Bar" is now a storage room stacked with hymn books. Bishop Caulton, his archdeacon, and other assistants dine in the alcove previously set aside for slot machines.

Purvis is about as far off as one can get in the British Commonwealth. The Bishop went to attend the Lambeth Conference that ended in London the first week in August. He still is not back.

The bay looks almost exactly as it did in 1943 when the first American destroyers threaded in. Hills of towering rain forest drop to the mangrove-fringed shore.

The only signs that a fleet lived here are a few beacons on grassy hills to seaward and a marker at a shoal in the bay. As a small American patrol boat slipped in recently, there was a native canoe on the quiet water, its spade-paddles plunging in unison. The American boat whooped its siren and the natives waved wildly.

One of the navigational beacons was built alongside the entrance, where the anti-submarine net was anchored. Under the beacon, marines dug out a machine-gun nest. Now net and nest are gone. On the wreck of the beacon the Anglican Friars have mounted a giant white cross, visible miles to seaward.

USMC